

Influence of personality disorder on the treatment of panic disorder – comparison study

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Submitted: December 22, 2004

Accepted: March 12, 2005

Key words: **panic disorder; personality disorders; controlled study; cognitive-behavioral therapy; antidepressants**

Neuroendocrinol Lett 2005; **26**(6):667-674 PMID: 16380683 NEL260605A29 © Neuroendocrinology Letters www.nel.edu

Supported by the Internal Grant Agency (IGA) of Ministry of Health: NF7580-2.

Abstract

Most clinicians tend to believe that the occurrence of the anxiety disorder in comorbidity with a personality disorder often leads to longer treatment, worsens the prognosis, and thus increasing treatment costs. The study is designed to compare the short-term effectiveness of combination of cognitive behavioral therapy and pharmacotherapy in patient suffering with panic disorder with and without personality disorder.

METHOD: We compare the efficacy of 6th week therapeutic program and 6th week follow up in patients suffering with panic disorder and/or agoraphobia and comorbid personality disorder (29 patients) and panic disorder and/or agoraphobia without comorbid personality disorder (31 patients). Diagnosis was done according to the ICD-10 research diagnostic criteria confirmed with MINI and support with psychological methods: IPDE, MCMI-III and TCI. Patients were treated with CBT and psychopharmacs. They were regularly assessed in week 0, 2, 4, 6 and 12 by an independent reviewer on the CGI (Clinical Global Improvement) for severity and change, PDSS (Panic Disorder Severity Scale), HAMA (Hamilton Anxiety Rating Scale), SDS (Sheehan Disability Scale), HDRS (Hamilton Depression Rating Scale), and in self-assessments BAI (Beck Anxiety Inventory) and BDI (Beck Depression Inventory).

RESULTS: A combination of CBT and pharmacotherapy proved to be the effective treatment of patients suffering with panic disorder and/or agoraphobia with or without comorbid personality disorder. The 12th week treatment efficacy in the patients with panic disorder without personality disorder had been showed significantly better compared with the group with panic disorder comorbid with personality disorder in CGI and specific inventory for panic disorder – PDSS. Also the scores in depression inventories HDRS and BDI showed significantly higher decrease during the treatment comparing with group without personality disorder. But the treatment effect between groups did not differ in objective anxiety scale HAMA, and subjective anxiety scale BAI.

Introduction

Personality disorders are relatively frequent in the general population. Their prevalence ranges from 10 to 13% (Lenzenweger et al. 1997). Among outpatient psychiatric population, 30–50% suffer with personality disorders (Koenigsberg et al. 1985) and about 15% of inpatients come to health care facilities because of problems related primarily to their personality disorders; up to half of the remaining inpatients suffer with comorbid personality disorder (Loranger 1990).

A diagnosis of personality disorder often evokes images of troublesome, difficult work with little hope for success, and correspondingly affects the therapist's conscious or unconscious attitudes from the very beginning of his relationship with the patient. These attitudes are often negative, moralising, and, according to Tyrer and Davidson (2000), sometimes rigid or even "delusional". Personality disorders rarely occur separately and are often related to other health problems, such as depressive states, anxiety disorders, eating disorders, alcohol and drug abuse, promiscuity, injury, infectious diseases etc. Most clinicians tend to believe that the occurrence of these problems in tandem with a personality disorder often leads to longer treatment, worsens the prognosis, and thus increases treatment costs. However, the latest overview of empirical psychotherapeutic studies of personality disorders shows that, despite of the myth of untreatability, treatment is relatively effective (Perry and Bond 2000). The authors have carried out a meta-analysis of 22 studies showing that significant positive changes during active treatment are 2–4 times higher than in control group without an active treatment. In four studies with the treatment outcome criterion of full remission, 52% of patients met this criterion after 1.3 years of treatment. Although the improvement is not as fast and substantial as in anxiety disorders or depressions, there is still a significant reduction in the patients' suffering and improvement in their adaptation in life. Nonetheless, this analysis does not answer the clinically relevant question: Does a comorbid personality disorder influence the effectiveness of treatment of a disorder on axis I?

According to most clinicians, treatment of a panic disorder with a comorbid personality disorder is more difficult, and achieving remission is less likely than in patients without a comorbid personality disorder. Unfortunately, there are no studies confirming this. Approximately half of all patients admitted for a panic disorder to the day-care clinic of the Prague Psychiatric Centre also suffer with a comorbid personality disorder. Prevailing personality disorders include histrionic, narcissistic, avoidant, dependent and borderline. The therapeutic programme for panic disorder patients with or without personality disorders is practically the same; it lasts six weeks, unless a patient decides to quit the therapy earlier.

The aim of our study is to compare the efficacy of treatment of panic disorder patients suffering with a comorbid personality disorder with the treatment of panic disorder patients without a comorbid personality disorder.

- The null hypothesis assumed that treating panic disorder patients with a comorbid personality disorder would be as effective in the parameters of alleviating of psychopathology as treating anxiety disorder patients without a comorbid personality disorder.
- An alternative hypothesis suggested that the treatment of patients with panic disorder and comorbid personality disorder would be less effective than the treatment of panic disorder patients without a comorbid personality disorder (in the sense of a smaller decrease in psychopathology and poorer social adaptation).

Further we assumed partial alternative hypotheses:

- that, besides panic disorder, personality disorder patients will more frequently suffer from other comorbid disorders, such as depressions, social phobia, generalised anxiety disorder, or eating disorders;
- that, we would identify a larger disproportion between objective and subjective assessment scales and a greater impact on work adaptation in these patients, as compared to panic disorder patients without personality disorders;
- that, they will more frequently experience a worsening of their condition already at the first follow up assessment six weeks after the end of the therapeutic programme.

Method

Patient group

So far, 60 patients who met the following admission criteria have been included into the study (31 with panic disorders without comorbid personality disorders and 29 with panic disorders and comorbid personality disorders):

- (a) research criteria ICD-10 (1996) for panic disorder or panic disorder with agoraphobia (as diagnosed by a structured MINI interview, Lecrubier et al. 1997);
- (b) age 18–45 years;
- (c) signed informed consent of the study.

The exclusion criteria were following: a) the presence of a major depressive episode (ICD-10 criteria for a depressive episode, BDI \geq 20 or HDRS \geq 18; dysthymia and minor depressive episodes were not reasons for exclusion from the study); b) organic mental disorder; c) psychotic disorder in the person's history; e) drug addiction; f) serious somatic illness; g) pregnancy and lactation in women; h) suicidality.

The inclusion and exclusion criteria of the study were confirmed by two independent experts. The study was approved by a joint ethical committee of the Prague Psychiatric Centre and the Psychiatric Hospital in Bohnice and accepted as a grant proposal by the Internal Grant Agency of the Ministry of Health of the Czech Republic (IGA MZ ČR: NF7580-2).

Assessment

After study enrolment, patients were assessed during the first two days of attendance at the day-care clinic before the beginning of treatment. The assessment

focused on psychopathology and was carried out by psychiatric rating scales in the second, fourth and sixth week, and in a brief follow up six weeks after the end of treatment (Table 1)

a) **Objective:** to assess the degree of psychopathology, we used the following objective psychological methods and rating scales:

- *IPDE* (International Personality Disorder Examination; Loranger et al., 1994) – a semistructured clinical interview developed to assess the personality disorders in the International Statistical Classification of Diseases and Health Related Problems, 10th Revision (ICD-10). It provides for a definite, probable, or negative diagnosis of each personality disorder, as well as the number of diagnostic criteria met and a unique Dimensional score for all patients on each disorder, regardless of whether or not they fulfill the criteria for the disorder. It purposefully neglects many neutral, positive, and adaptive traits because they are irrelevant to a personality disorder assessment.
- *TCI* (Temperament and Character Inventory; Cloninger et al., 1994) – based on Cloninger's theory (Cloninger, 1994) of four temperament dimensions that are moderately heritable and stable throughout life and of three character dimensions. It is designed to be a comprehensive inventory of personality. Its temperament dimensions are reported to correspond to the underlying genetic structure of personality. The character scales are designed to distinguish whether a person has any personality disorders, and the temperament scales allow the differential diagnosis of categorical subtypes of personality disorders, as well as types of normal temperament.
- *MCMI-III* (Millon Clinical Multiaxial Inventory – III; Millon a Davis, 1997) – the scales of the MCMI are grouped into the categories of personality and psychopathology to reflect the DSM distinction between Axis II and Axis I. Separate scales distinguish the more enduring personality characteristics of patients (Axis II) from the acute clinical disorders they display (Axis I). Scale elevations and configurations can be used to suggest specific patient diagnoses and clinical dynamics as well as testable hypotheses about current behavior.
- *CGI* (Clinical Global Impression) – global assessment of the degree of psychopathology. The source of data is an as complete as possible collection of information about the patient's behaviour (Guy 1976).
- *PDSS* (a structured objective questionnaire assessing both the frequency and intensity of panic attacks and the degree of avoidant behaviour and social consequences of anxiety).
- *HAMA* (Hamilton Anxiety Rating Scale) – a structured questionnaire for adult patients diagnosed with anxiety neurosis. Its purpose is to monitor changes during therapy; the source of data is the patient's verbal and non-verbal behaviour during examination (Hamilton 1959).

- *SDS* (Sheehan Disability Scale) – 10-point analogue scale on which, after talking with the therapist, the patients indicate the degree to which their work, social and family life are affected.
- *HDRS* (Hamilton Depression Rating Scale) – 21-item instrument for assessing depression (Hamilton 1967).

b) **Subjective:**

- *BAI* – (Beck Anxiety Inventory) – self-rating scale with 21 anxiety indicators (Beck a Emery 1985).
- *BDI* – (Beck Depression Inventory) – self-rating scale with 21 depression indicators (Beck et al. 1961).

Treatment approaches

Patients were treated with SSRI and cognitive-behavioural therapy. The medication of the first choice was paroxetine in doses of 10 mg during the first week and 20 mg during the second week. In the fourth week there was a possibility to double the dose in case of insufficient effectiveness. If no results occurred by the end of the fourth week, paroxetine was replaced by another SSRI. If a patient had used paroxetine in the past, another SSRI or SNRI was applied. If a patient did not agree with the medication, he/she was treated only with CBT (15 patients). If patients used anxiolytics, their dose was gradually tapered (by 1/8 per week). The cognitive-behavioural therapy was performed in a group format. Patients participated in a structured CBT programme established on the ward, which consisted of 18 CBT groups (vicious circle of panic disorder and agoraphobia, cognitive restructuring, controlled seizure, exposure treatment, communication training, practical problem-solving and adjustment of cognitive schemes) and 12 personal history groups focusing on cognitive schemes. This is a short CBT programme focusing on managing panic and agoraphobia; it is not aimed at treatment of personality disorders.

Table 1. Timetable of the rating scales administration

Assessment tool	week 0	week 2	week 4	week 6	week 12
ICD-10	X				
MINI interview	X				
CGI-severity	X	X	X	X	X
CGI – improvement		X	X	X	X
PDSS	X	X	X	X	X
HAMA	X	X	X	X	X
SDS	X				X
HRSD	X				X
BAI	X	X	X	X	X
BDI	X				X

ICD-10: International Classification of Diseases, tenth revision
M.I.N.I.: MINI International Neuropsychiatric Interview
CGI: Clinical Global Impression
PDSS: Panic Disorder Severity Scale
HAMA: Hamilton Anxiety Rating Scale
SDS: Sheehan Disability Scale
HAMD: Hamilton Depression Rating Scale
BAI: Beck Anxiety Inventory
BDI: Beck Depression Inventory

Results

Description of the patient group:

Sixty patients were included into the study – 14 men and 46 women. Twenty-nine patients met the ICD-10 research criteria for personality disorders (for the patients' characteristics see Table 2). There were no statistically significant differences between the group of panic disorder patients suffering from a comorbid personality disorder and the panic disorder patients without comorbid personality disorder neither in terms of demographic characteristics such as age, sex, marital status, employment or the number of current comorbid disorders (see Table 2), nor in the average scores of psychopathology rating scales of CGI, PDSS, HAMA, SDS, HDRS, BAI and BDI (see Table 4) (t-tests: n.s.). The most common personality disorder of patients admitted for panic disorders with or without agoraphobia was a dependent personality disorder (41.4 %) and histrionic personality disorder (27.6 %). Comorbidity of other mental disorders in both groups was relatively high: 58.6% of panic disorder and personality disorder patients were currently suffering from another disorder (most frequently GAD 27.6% and social phobia 20.7%), as were 45.2% of panic disorder patients without a diagnosed personality disorder (most frequently social phobia 25.8% and GAD 16.1%). Although the percentage of current comorbid disorders is higher among patients with personality disorders, the difference between the groups does not reach statistical significance (chi²: n.s.). Our hypothesis that personality disorder patient groups would significantly more often suffer from another comorbid anxiety disorder was not confirmed.

Treatment

Patients were treated with CBT and pharmacotherapy. The CBT programme is standardized; patients undergo

the same steps of treatment (training, cognitive restructuring, interoceptive exposure, exposure in vivo, problem solving, adjustment of cognitive schemas, social skills training). Pharmacotherapy was more variable, although the basic procedure was set up identically. The average doses of antidepressant medication and adjuvant therapy with anxiolytics or antipsychotics are given in Table 3. In order to compare the antidepressants we calculated the doses of individual drugs to the equivalents of: an antidepressant (paroxetine 20 mg = citalopram 20 mg or fluoxetine 20 mg or sertraline 50 mg or fluvoxamine 50 mg or escitalopram 10 mg or venlafaxine 75mg), or an anxiolytic (alprazolam 0.75 mg = clonazepam 0.5 mg or diazepam 15 mg or oxazepam 20 mg). Risperidone was the only antipsychotic used. The average dose of an antidepressant calculated to an equivalent was significantly higher in the group of comorbid disorder patients than in the group without a comorbid personality disorder. However, when calculated for the actual number of medicated patients (as opposed to the whole group) the average dose is not different. The average dose of the equivalent of an anxiolytic is far lower in patients without personality disorders; however, considering the small number of such medicated patients and significant standard deviation, the difference does not reach a level of significance.

Rating scales

CGI – severity

In the beginning, there were not significant differences in severity scores of clinical global impression scale in both groups (4.59 + 0.56 in group of patients with personality disorders versus 4.55 + 0.55 in group without personality disorders). Severity scores in both groups dropped significantly in both groups during the treatment (sixth week 2.59 + 0.83 in group with personality disorders, versus 1.94 + 0.53 in the other group). The difference between the groups after two weeks of treat-

Table 2. Description of the patients

	Panic Disorder with Personality Disorder	Panic Disorder without Personality Disorder	Statistics
Age	33,10 + 7,77	35,39 + 9,61	t-test: n.s.
Sex (Male:Female)	7 : 22	7 : 24	chi ² : n.s.
Marital Status (Single:Married:Divorced/Widowed)	11 : 13 : 5	14 : 16 : 1	chi ² : n.s.
Personality Disorder	100 %	0	
• Histrionic	8 (27,6 %)		
• Narcissistic	4 (13,8 %)		
• Avoidant	3 (10,3%)		
• Dependent	12 (41,4 %)		
• Borderline	2 (6,9 %)		
Comorbidity – current disorders	17 (58,6%)	14 (45,2%)	chi ² : n.s.
• Dysthymia/mixed anxiety and depressive disorder	3 (10,3%)	0	
• Social Phobia	6 (20,7%)	8 (25,8%)	
• GAD	8 (27,6%)	5 (16,1%)	
• Eating Disorder	1 (3,5%)	1 (3,2%)	
• Somatization Disorder/neurasthenia	3 (10,3%)	0	
• Claustrophobia	0	2 (6,5%)	

Table 3. Average dose of medication according to the equivalent of an antidepressant, anxiolytic and antipsychotic

	Panic Disorder with Personality Disorder	Panic Disorder without Personality Disorder	Statistics
Patients with medication: patients without medication	26 : 3	19 : 12	chi2: P < 0,05
Antidepressants, patients without : patients with	3:29	12: 19	chi2: P < 0,05
Anxiolytics: patients without : patients with	10 : 19	5 : 26	chi2: n.s.
Average equivalent dose of antidepressant (paroxetine) in the group of all patients	30,34 + 10,57	19,35 + 15,59	t-test: P < 0,05
Average equivalent dose of antidepressant (paroxetine) of one medicated patient	33,84 + 10,24	31,59 + 12,02	t-test: n.s.
Average equivalent dose of anxiolytic (alprazolam) in the group of all patients	0,52 + 0,75	0,13 + 0,22	t-test: P = n.s.
Average equivalent dose of anxiolytic (alprazolam) of one medicated patient	1,51 + 0,99	0,83 + 0,58	t-test: n.s.

ment is not significant. From the fourth week onwards, significant differences between the groups began to occur (Mann Whitney and non-parametrical ANOVA (Kruskal Wallis) both $p < 0.05$), this difference was evident both in the 6th ($p < 0.05$) and in the 12th week of assessment ($p < 0.01$) (see Table 4). According to the CGI – severity score, the treatment of panic disorder patients leads to an improvement in both groups of patients (with and without comorbid personality disorder). From the fourth week, the effectiveness of the treatment is significantly higher for patients without personality disorder than for patients with a personality disorder; this difference persists until the 12th week of assessment.

PDSS

PDSS is an instrument for specific assessment of the severity of a panic disorder. It is the most sensitive instrument for this disorder. In both groups of patients with or without personality disorder there was a significant decrease in total scores during 12-week study period (from 17.45 + 3.11, and 17.29 + 2.93 respectively, to 8.0 + 4.07, and 5.23 + 2.82 respectively). The difference between the groups is statistically significant in the 4th and 12th week of the study [both Mann Whitney and non-parametrical ANOVA (Kruskal Wallis); $p < 0.05$], in favour of a more significant decrease in the group without personality disorders. However, in the 6th week of the study the difference is not significant (Table 4). The results suggest that after the termination of the treatment in the 6th week of the study, when the decrease of panic and agoraphobic symptomatology was similar in both groups, further improvement occurs in the group of patients without a personality disorder, while among personality disorder patients this tendency is less significant. The results show that one of the differences in treating panic disorder patients with a personality disorder, as compared with patients who do not suffer from personality disorders, might be the patient's ability to continue the change already started, i.e. to continue with CBT steps learned in the programme (especially exposures to anxiety eliciting situations).

HAMA

In the objective rating scale intended for measuring overall symptoms of anxiety (not solely focused on panic

and agoraphobic symptomatology), both clinically and statistically significant decrease of total scores occurred (from 23.72 + 4.12 in the personality disorders group and 24.65 + 5.06 in the group without personality disorders at the beginning of the study to scores of 11.41 + 5.34 and 9.94 + 4.55, respectively, in the 12th week of the study). However, no significant difference was found between two patient groups (Table 4). The results show that the treatment of non-specific symptomatology of anxiety was as effective in personality disorder patients as in patients without personality disorders. It should be noted that the programme was explicitly focused on panic disorder and agoraphobia and not other anxiety symptoms. Moreover, programme is not designed for the treatment of personality disorders. It seems that there is no difference in the effectiveness of treatment between personality disorder patients and those who do not suffer from this disorder.

SDS

At the beginning there were no significant differences between the groups in the evaluation of social and family handicaps on the SDS scale. However, there was a difference in profession/work item (see Table 4). On the average, patients evaluated their degree of impairment in work as strongly affected (7.41 + 1.86 in personality disorder patients and 6.29 + 1.77 in patients without personality disorders). Impairment in social and family life was evaluated as moderate. During treatment there was a significant decrease in all of three rating scale items, the impairment mostly perceived as mild or very mild. In the 12th week of the study there is a significant difference between the groups in terms of work impairment evaluation [Mann Whitney and non-parametrical ANOVA (Kruskal Wallis); $p < 0.01$]. The group without personality disorders had lower impairment scores (Table 4). The results show that in both groups perceived impairment in the area of occupation/work/profession, social and family life dropped significantly. The only difference between the groups before and after the treatment is how they perceive the work impairment that is corresponding with our long-term clinical experience – even after the treatment; personality disorder patients have difficulties with occupational adaptation. This area remains frustrating for them, despite the fact their psychopathology has decreased significantly. On the contrary, in patients with-

out personality disorders the decrease in psychopathology and overall improvement leads to a parallel increase in self-confidence in the professional area.

HDRS

An objective assessment of symptoms of depression with this standard scale shows mild depression symptoms at the beginning of the treatment, with virtually no difference between the groups (14.14 + 3.89 in personality disorder patients versus 14.0 + 4.31 in the other group). In both groups there is a decrease of depression score during treatment (10.59 + 4.37 among personality disorder patients versus 6.61 + 3.16 in the other group). A significant difference between groups occurred after 12 weeks of the study, when patients without personality disorders showed a larger decrease in HDRS scores than personality disorder patients [Mann Whitney and non-parametrical ANOVA (Kruskal Wallis): $p < 0.05$] (see Table 4). It seems that even though the programme was

not focused on treating depression symptoms, these were alleviated in both groups during the treatment. We do not know why there is a smaller decrease of depression among personality disorder patients. According to the results we assume that it might be related to the smaller decrease in panic and agoraphobic symptomatology (measured by PDSS) and lower self-confidence in abilities to adapt oneself professionally (as measured SDS).

BAI

Time path of BAI scores – general subjective scale for anxiety symptoms – is similar to those of HAMA. The scores of both groups at the beginning are similar (22.93 + 6.39 in the personality disorders group versus 26.1 + 8.67 in the group without personality disorders), and during treatment a significant reduction of psychopathology occurs in both groups (sixth week: 15.83 + 6.22 versus 16.84 + 7.31). The pattern of symptom decrease is very similar in both groups; no significant difference

Figure 1. CGI-SEVERITY

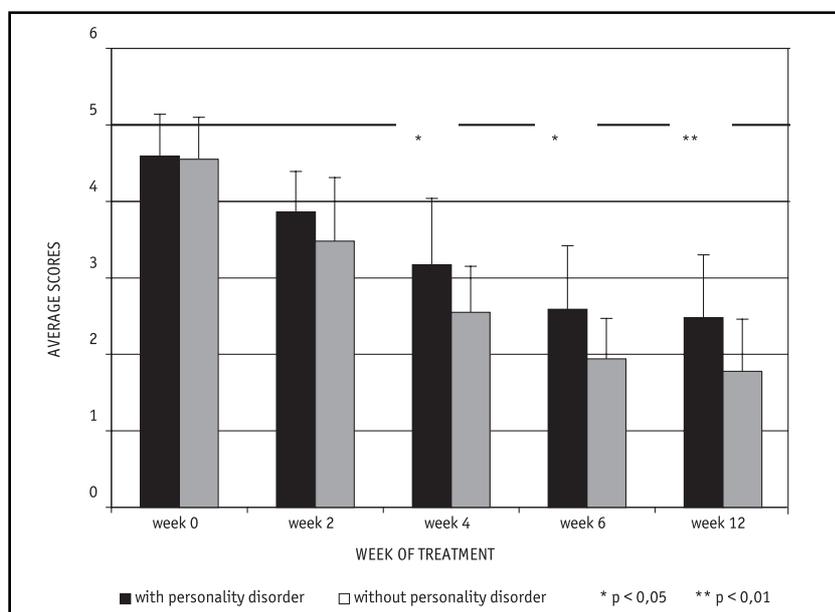
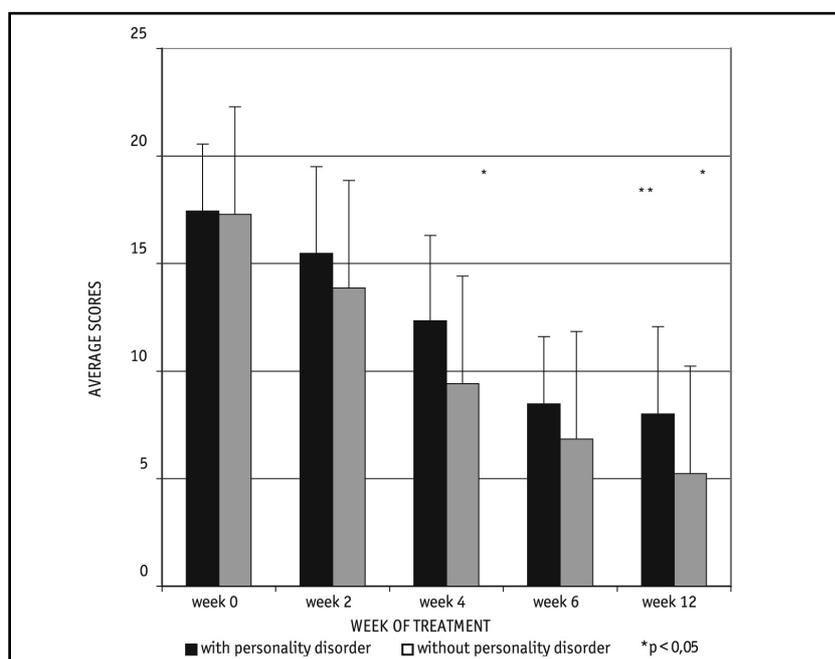


Figure 2. PDSS



was found in either of the study visit (Table 4). Subjective evaluation of a wide range of anxiety symptoms in BDI rating scale confirms these acquired data. Panic disorder patients – with or without personality disorders – are improving rapidly during a short-term treatment programme; and if we do not focus on the specific symptoms for which they were admitted and treated, the changes are to be similar.

BDI

The Beck Depression Inventory is designed for evaluating subjective depression symptoms. Similarly to the objective scale for depression (HRDS), there was no difference in depression symptoms at the beginning of the treatment (15.41 + 6.21 among personality disorder patients versus 13.26 + 6.1 in the second group). Average scores in both groups agree with mild depression. According to our hypothesis we expected a disproportion between the HRDS and BDI assessment: personal-

ity disorder patients overrating individual symptoms. This did not prove to be the case; there is no significant difference between the groups on either the objective or subjective scales. At the end of the treatment there is a significant difference between the groups in the 12th week [Mann Whitney and non-parametrical ANOVA (Kruskal Wallis); $p < 0.05$] (see Table 4). We understand this finding similarly to HDRS and SDS results – patients finished the treatment and most of them started to work; those suffering from personality disorders had lower self-confidence in their adaptability at work than patients without personality disorders.

Discussion

Referring back to our hypotheses, the study has shown that neither the null hypothesis nor the alternative hypothesis is completely valid; in other words, both are partly valid. The treatment of panic disorder patients with

Table 4. Changes of psychopathology during the treatment

		Panic Disorder with Personality Disorder (n=29)	Panic Disorder without Personality Disorder (n=31)	Statistics (Mann- Whitney test)
CGI – severity	0.week	4,59 + 0,55	4,55 + 0,55	n.s.
	2.week	3,86 + 0,53	3,48 + 0,83	n.s.
	4.week	3,17 + 0,87	2,55 + 0,6	p< 0.05
	6.week	2,59 + 0,83	1,94 + 0,53	p< 0.05
	12.week	2,48 + 0,82	1,78 + 0,68	p< 0.01
PDSS	0.week	17,45 + 3,11	17,29 + 2,93	n.s.
	2.week	15,48 + 4,02	13,87 + 3,65	n.s.
	4.week	12,34 + 3,97	9,42 + 3,52	p< 0.05
	6.week	8,48 + 3,12	6,84 + 2,64	n.s.
	12.week	8,0 + 4,07	5,23 + 2,82	p< 0.05
HAMA	0.week	23,72 + 4,12	24,65 + 5,06	n.s.
	2.week	20,79 + 5,61	19,39 + 6,03	n.s.
	4.week	16,52 + 6,25	14,45 + 5,86	n.s.
	6.week	12,48 + 4,65	10,19 + 4,31	n.s.
	12.week	11,41 + 5,34	9,94 + 4,55	n.s.
SDS	0. week	7,41 + 1,86	6,29 + 1,77	p< 0.05
	• work	5 + 2,13	4,94 + 1,94	n.s.
	• social activities	4 + 2,97	2,97 + 1,22	n.s.
SDS	12.week	3,9 + 1,82	2,32 + 0,92	p< 0.01
	• work	3,14 + 1,64	2,39 + 1,15	n.s.
	• social activities	2,76 + 1,64	1,94 + 0,77	n.s.
HDRS	0. week	14,14 + 3,89	14 + 4,31	n.s.
	12.week	10,59 + 4,37	6,61 + 3,16	p< 0.05
BAI	0.week	22,93 + 6,39	26,1 + 8,67	n.s.
	2.week	20,62 + 6,29	20,81 + 9,93	n.s.
	4.week	18,52 + 6,82	17,19 + 7,48	n.s.
	6.week	15,83 + 6,22	16,84 + 7,31	n.s.
	12.week	15,83 + 6,21	14,68 + 6,57	n.s.
BDI	0.week	15,41 + 6,21	13,26 + 6,1	n.s.
	12.week	12,72 + 6,14	6,48 + 3,67	p< 0.05

a comorbid personality disorder was as effective in alleviating non-specific anxiety symptomatology (measured by HAMA and BDI) as was treatment for panic disorder patients without a comorbid personality disorder.

On the other hand, treatment of patients without personality disorders was significantly more effective for specific panic and agoraphobic symptomatology (target of the programme) than it was for patients with personality disorders. In personality disorder patients there was a smaller decrease in symptomatology; patients evaluated themselves as less socially adapted in the area of work and profession.

Another hypothesis – that in addition to panic disorder, personality disorder patients would more frequently suffer from other comorbid disorders – was not confirmed. In both groups we found frequent comorbidity, most often with social phobia and generalised anxiety disorder. If we had chosen different selection criteria, we might have found significant comorbidity with a depression disorder. However, our aim was to evaluate the therapeutic effectiveness for a panic disorder and we did not include patients with stronger comorbid depression (those who met MKN-10 criteria for a depressive episode or reached a score of over 20 in BDI or over 18 in HDRS).

Surprisingly we did not find any prominent disproportion between the objective and subjective measures of rating scales between group of personality disorder patients and group of patients without personality disorders. We expected that the objective scales would show similar results and the subjective scales would show significantly higher scores among personality disorder patients. There was not found any difference between the groups; average total scores of BAI rating scale are lower in personality disorder patients than in the other group. However, our hypothesis was confirmed partly on the SDS rating scale of social handicaps (item “work”). In the beginning of the study, patients from both groups evaluated their work adaptation similarly; at the end of treatment patients without personality disorders perceived their work adaptation as being significantly better.

It seems that our results may reflect reality to a certain degree. Follow up evaluation performed six weeks after the end of therapeutic programme showed worsening of some of the patients with personality disorder (CGI – improvement to 1 and 2 in 69% after six weeks and in 62.1% after 12 weeks); in the group without personality disorders there was a further increase in the number of improvements (in 80.6% after six weeks and in 90.3% after 12 weeks).

Perry and Bond (2000) claim that, despite of earlier assumptions about untreatability; treatment of personality disorders is relatively effective. In all studies they reviewed the improvement in personality disorder patients was not as pronounced as in patients without personality disorders, and the effect of therapy varied for different types of personality disorders. The greatest changes were observed in various symptoms, while social adaptation, problems in interpersonal relationships and individual personality traits were influenced by treatment very slowly. Our findings in the group of personality dis-

order patients with or without agoraphobia show similar result – treatment is successful, although significantly less in some parameters (in our case, specific panic and agoraphobia symptomatology, depression symptoms and work adaptation) than among patients without personality disorders.

Conclusions

Our study showed that, personality disorder in panic disorder patients is related to a smaller decrease of specific panic and agoraphobic symptomatology during treatment than in patients without personality disorders. Nevertheless, a significant decrease in symptomatology occurs in personality disorder patients as well. And a large proportion of them is with significant overall improvement. However, they are less able to continue with improvements after the end of the treatment and improvement in their self-confidence to manage their work situation is not the same as for patients without personality disorders.

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