ORIGINAL ARTICLE

Relationship between personality and self-stigma in mixed neurotic spectrum and depressive disorders – cross sectional study

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Abstract

INTRODUCTION: Self-stigma is a maladaptive psychosocial phenomenon affecting a considerable part of psychiatric patients. Nevertheless, not everyone with mental health issues internalizes societal stigma. The goal of the study was to identify psychological features significantly connected to the presence of self-stigma.
METHOD: 76 neurotic inpatients undergoing a six-week hospitalization in the psychotherapeutic department attended the study. The probands completed following questionnaires at the beginning of the treatment – ISMI (Internalized Stigma of Mental Illness Scale), TCI-R (Temperament and Character Inventory, revised version), ADHS (Adult Dispositional Hope Scale), DES (Dissociative Experiences Scale), BAI (Beck Anxiety Scale), BDI-II (Beck Depression Scale, second edition), and CGI (Clinical Global Impression, both the subjective and objective versions). Descriptive statistics processed the scales scores, t-tests, correlations, linear regression, and backward stepwise regression.
RESULTS: The overall level of self-stigma in the neurotic patients with possible comorbid depression significantly correlated with several psychological features. Self-stigma significantly positively correlated with the harm avoidance trait, the symptoms of dissociation, anxiety, and depression, and the overall level of psychopathology measured by objCGI and subjCGI. It also significantly negatively correlated with the persistence and self-directedness traits and hope and its subscales – pathway thinking and agency. After applying backward stepwise regression, only three of the mentioned factors predicted the level of self-stigma – self-directedness, hope, and the subjective evaluation of own mental state. Other factors were suppressed during the analysis.
CONCLUSION: Patients with more severe psychopathology show larger tendencies to stigmatize themselves. Also low self-directedness and lack of hope are typical for individuals with higher levels of self-stigma. These personality characteristics are affected by self-stigma and play a significant role in the efficacy of both the pharmacological and psychotherapeutic treatment of neuroses. Thus, the issue of self-stigma requires our attention and needs to be addressed in the treatment.

INTRODUCTION

Stigma of mental disorders presents one of the current issues dealt by psychiatrists and clinical psychologists. Psychiatric patients might be targets of stigmatizing prejudices at several levels. They might be despised and discriminated by society and its institutions (such as schools and health care facilities). Many individuals with mental health problems also suffer from self-stigma (Livingston & Boyd 2010). These persons uncritically believe the societal prejudices and thus are persuaded of their inferiority and untreatability of their mental issues (Corrigan *et al* 2011). According to some researchers, self-stigma is a part of the stigma that brings the most harmful consequences. Self-stigma often leads to dysphoric emotions and a decrease in self-esteem and quality of life (Corrigan *et al* 2006). Social isolation or other forms of potentially maladaptive behavior are also common. In the extreme, self-stigma might lead to suicide (Schulze & Angermeyer 2003). The negative impact on the treatment efficacy of mental disorders is also the rule rather than the exception (Tsang *et al* 2010; Ritscher & Phelan 2004). The results of our study (Ociskova *et al* 2014) identified the inverse relationship between self-stigma and the treatment efficacy in neurotic spectrum disorders.

Nevertheless, not everyone, who is stigmatized by society, internalizes the perceived prejudices. Some individuals are ready to persuade others that their stereotypes do not correspond to reality (Camp *et al* 2002). Others do not notice stigma, and for this reason they do not develop self-stigma. Thus, it is important to identify personality traits, which serve as a buffer against the negative impacts of stigma, and which increase the risk of the internalization of stigma. The current research explores the relationship between self-stigma and personality through the lenses of the Cloninger's biosocial theory of personality (Farmer & Goldberg 2008). These studies have found that self-stigma in psychiatric patients is connected with higher scores in the harm avoidance scale and lower scores on the persistence and self-directedness scales (Margetić *et al* 2010). Self-directedness and persistence share similarities with the Snyder's theory of hope. According to Snyder (2000), hope emerges when a person identifies a goal to achieve and has approximately fifty percent chance of success. The individual consequently thinks of adaptive and flexible ways to achieve it and is sufficiently motivated to pursue the chosen way or to change it if necessary (Snyder 2000). When these conditions are sufficiently fulfilled, feelings of hope emerge. It has been shown that individuals with internalized stigma experience despair and hopelessness rather than hope (Livingston & Boyd 2010; Hasson-Ohayon *et al* 2008).

Dissociation is seen as a coping strategy to deal with intense anxiety states, and painful trauma experiences (Watson *et al* 2006; Ross 2007; Ptacek *et al* 2007). We reported high level of dissociation in panic disorder (Pastucha *et al* 2009b), obsessive compulsive disorder (Prasko *et al* 2009; Raszka *et al* 2009), dissociative disorders (Pastucha *et al* 2009c) and borderline personality disorder (Pastucha *et al* 2009a). There is no information about relation between dissociation and self-stigma in literature.

The goal of this study was to identify personality factors, including hope and dissociation, influencing the level of self-stigma in patients with neurotic spectrum disorders with or without comorbid depression. The factors examined were personality traits according to the Cloninger´s biosocial theory, hope, dissociation, and the symptoms severity.

METHOD

Patients
Patients are suffering from neurotic spectrum disorders with or without comorbid depression and personality disorder, referred to an intensive psychotherapeutic inpatients program, were enrolled in the study. The inclusion criteria were:

1. Age 18–75 years
2. Neurotic spectrum diagnosis according to ICD-10 (1996)

Excluded were patients diagnosed with bipolar disorder, schizophrenia and other psychotic disorders, organic disorder, and those who were severely physically handicapped. Patients with mild or moderate depression and patients with comorbid personality disorders were included.

The diagnosis, according to the research criteria of ICD-10 (1996), was confirmed by 3 independent psychiatrists: an outpatient psychiatrist, who firstly assessed the patient, a psychiatrist at the psychotherapeutic department, and a senior psychiatrist, who supervised the department. The diagnosis was confirmed by the evaluation with structured interview M.I.N.I. conducted by an experienced psychologist (Lecrubier *et al* 1997).

Methods of evaluation
After patients had signed an informed consent, they filled out several scales and questionnaires. The following ones were completed at the start and the end of the treatment:

TCI-R (Farmer & Goldberg 2008) – Temperament and Character Inventory, revised version, consists of 240 items out of which 5 are check items. The inventory measures four temperaments and three character traits and number of their subscales. The temperament scales are novelty seeking, harm avoidance, reward dependence, and persistence. The character scales are self-directedness, cooperation, and self-transcendence (Gillespie *et al* 2003). Czech norms were made by Preiss and Klose (2001).

ADHS (Snyder 2000) – Adult Dispositional Hope Scale includes 12 items – four of them are focused on pathway thinking, another four are related to a sense of agency, and the last four are distractors. Patients choose one of the eight points on a scale according to a level of the agreement with the statements.

DES (Bernstein & Putman 1986) – Dissociative Experience Scale describes 28 experiences. Patients mark a spot on a 10 cm line according to how often they experience the symptoms. The Czech version of the scale is psychometric equal to the original one (Ptacek *et al* 2007). Pathological dissociation might be evaluated by using Dissociative Experience Scale Taxon (DES-T). DES-T consists of 8 out of 28 items of DES (items 3, 5, 7, 8, 12, 13, 22, and 27) and focuses on depersonalization, derealization, identity alteration, and amnestic quality of pathological dissociations (Waller & Ross 1997).

ISMI (Ritsher *et al* 2003) – Internalized Stigma Of Mental Illness scale consists of 29 statements with a four-point scale measuring the level of the agreement with them. The scale measures five facets of internalized stigma – alienation, perceived discrimination, stereotype endorsement, social withdrawal, and resistance to stigma. The scale was standardized in Czech by Ociskova *et al* (2014, in press).

BDI-II (Beck *et al* 1996) – Beck Depression Inventory, second edition, consists of 21 items in which patients choose, which of the described depressive symptoms they perceived in a last week and to what extent they were unpleasant.

BAI (Beck *et al* 1988) – The scale represents 21 symptoms of anxiety, each with a four-point Likert scale. The patient chooses perceived symptoms and their severity experienced during the last week.

CGI (Guy 1976) – Clinical Global Impression is a global evaluation of the severity of psychopathology. The sources of the assessment are two. The first presents an assessment by a physician (objCGI) about the seriousness of the psychopathology; the second one is a self-evaluation done by a patient on a scale 1–7 where every point of the scale has described its unique characteristics (subjCGI).

Statistics were calculated by using the Prism (Graph-Pad PRISM version 5.0; http://www.graphpad.com/prism/prism.htm) and SPSS 17.0 (2008). Descriptive statistics processed demographic data and average scale scores; means, medians, standard deviations, and character of data distribution were also identified. The differences in the scores during the treatment were calculated by pair t-tests. The relations between the categories were evaluated by correlations and linear regression. A further analysis was performed with backward stepwise regression. It agreed that a 5% level of statistical significance would be accepted in all tests. The research was conducted in accordance with the latest version of the Helsinki Declaration and the Guideline for Good Clinical Practice (EMEA 2002). The study was approved by the local ethical committee. All patients signed informal consents.

Results

Subjects

There were 76 patients included in the study, 58 females, and 18 males. Another thirteen patients admitted to the department were not interested in participation. The mean age was 40.20±12.85 years. Eleven patients (14.7%) passed elementary school, 22 (29.3%) had an educational level of skill workers, 33 (44%) passed secondary school, and 8 (10.7%) university. One patient did not finish elementary school, and one did not fill in the education level question. Twenty-six patients (34.2%) were unemployed, 38 (50.0%) were working as employees or were self-employed, 4 (5.3%) were taking rent, and 4 (5.3%) were taking old age pension. Twenty-six patients (34.2%) were single, 32 (42.1%) married, 17 (22.4%) divorced, and 1 was widowed.

Tab. 1. A primary diagnosis and comorbidities.

Primary diagnosis	Number	Comorbidities (number of patients)				
		Without	One dis.	Two dis.	3 and more dis.	PD
Depressive disorder	17	3	3	7	4	4
Neurotic spectrum	59	21	22	13	3	19
Panic disorder/ agoraphobia	16	6	5	4	1	4
OCD	9	4	3	1	1	3
GAD	6	4	1	1	0	0
Mixed anxiety-depressive disorder	7	3	4	0	0	4
Adjustment disorders	4	0	2	2	0	4
Social phobia	7	1	4	2	0	2
Dissociative/somatoform disorder/neurastenia	10	3	3	3	1	2

Dis = disorder; PD = a personality disorder

In 59 patients (77.6%) the primary diagnosis was a neurotic disorder and in 17 patients (22.4%) it was a depressive disorder. 52 patients (68.4%) were diagnosed with comorbid disorders (Table 1). 23 patients (30.3%) had a comorbid personality disorder.

Medication
Patients were treated by using standard dosages of antidepressants (Table 2). There were no significant differences between average doses of antidepressants in patients with and without a comorbid depressive disorder (60.00±38.24 mg versus 46.73±34.54 mg of paroxetine equivalent, Mann-Whitney test: M-W U=326; n.s.). There were no significant differences in mean doses of anxiolytic or antipsychotic medication between patients with and without comorbid depression.

Relationship between self-stigma and personality traits
The level of self-stigma significantly positively correlated with harm avoidance (Table 3). The reward dependence and persistence trait was significantly negatively connected to self-stigma, as well. The more patients stigmatize themselves; the more isolated and less persistent they were in their efforts to deal with stressors and hassles. The similar connection was identified between self-stigma and self-directedness.

Relationship between internalized stigma and hope
There was an extremely significant correlation between self-stigma and hope (Table 3). Similarly both sub scores of Hope Scale – pathway thinking and agency – significantly correlated with the level of self-stigma.

Relationship between internalized stigma and level of dissociation
The level of self-stigma was significantly positively connected to the overall level of dissociation measured by DES (Table 3). The more patients stigmatize themselves, the more they dissociate. The pathological dissociation evaluated by DES-taxon was positively connected to self-stigma as well (Table 3). Self-stigma is then related to both to the pathological and non-pathological symptoms of dissociation.

Internalized stigma and its relation to the severity of the psychopathology
Self-stigma significantly positively correlated with the level of depressive symptoms (BDI-II), the anxiety symptoms (BAI), and the clinical global evaluation of the severity of psychopathology made by the psychiatrist (objCGI) as well as the assessment made by the patients themselves (subjCGI) (Table 3).

Relationship between internalized stigma, depresivity, and a personality disorder
The average score of ISMI was also statistically higher among patients with depression than in the non-depressive group (Table 4). The patients without a depressive disorder had significantly lower scores in most ISMI subscales (alienation, stereotype agreement, social withdrawal) except for the stigma resistance subscale that was significantly higher. There was no significant difference in the perceived discrimination subscale.. It seems that the depressive individuals with neurotic disorders stigmatize themselves more than the

Tab. 2. Primary diagnosis, medication and their combinations.

Primary diagnosis	Number	Medication mg and numbers of treated patients					
		AD	ANX	AP2	Comb 2 meds	Comb 3 meds	Without meds
Depressive disorder	17	72.00 mg (15)	1.19 mg (8)	1.90 mg (5)	6	3	2
Neurotic spectrum	59	43.33 mg (51)	1.03 mg (16)	1.33 mg (10)	15	5	7
Panic disorder/ agoraphobia	16	43.08 mg (13)	1.17 mg (6)	0.67 mg (3)	3	3	3
OCD	9	60.00 mg (7)	0	5.5 mg (1)	1 / 2	0 / 1	2 / 1
GAD	6	51.67 mg (6)	0.75 mg (3)	0	4	0	0
Mixed anxiety-depressive disorder	7	56.67 mg (6)	0.33 mg (3)	1.00 mg (3)	1	2	0
Adaptation disorders	4	46.67 mg (3)	0	0	0	0	1
Social phobia	7	31.43 mg (7)	0.75 mg (1)	1. 00 mg (1)	2	0	0
Dissociative/somatoform disorder/neurasthenia	10	27.50 mg (8)	1.83 mg (3)	0.88 mg (2)	5	0	2
Average dose converted to an index drug (paroxetin, alprazolam, risperidon) in mg per day at		50.62 mg (65)	1.08 mg (24)	1.52 mg (15)			

AD = antidepressants – equivalent of paroxetine; AP2 = antipsychotics of second generation – equivalent of risperidone; ANX = anxiolytics; Comb = combination;

non-depressive neurotic ones and are also less resistant against self-stigma.

The average overall rating of ISMI was statistically higher in the patients with a comorbid personality disorder compared to the patients without a personality disorder (Table 4). The subscales that influenced this difference most significantly were the alienation and perceived discrimination. Both of them were noticeably higher in the patients with a personality disorder. For this reason, the patients with a personality disorder stigmatize themselves more than the individuals without a personality disorder. It comes from the feelings of being alienated and discriminated against them.

Factors most contributing to self-stigma
As there were many psychological features significantly connected to the overall level of self-stigma, we decided to perform backward stepwise regression to reduce the number of the factors to the most explaining factors. The factors chosen for regression were those that correlated the most with the overall level of self-stigma. Due to the considerable overlap between hope (measured by Hope Scale) and depression (measured by BDI-II), we decided to include the most correlating factor into regression analysis – hope. The same process of decision making was applied in the case of objective and subjective CGI. The factors included in regression were harm avoidance, persistence, self-directedness (all of them measured by TCI-R), the overall level of hope (Hope Scale), dissociation measured by DES, and the subjective evaluation of the mental state (subjCGI).

The dependent variable was the overall level of self-stigma (measured by ISMI). The outcome of backward stepwise regression identified three the most significant factors explaining 64.6% of the variance of the overall score of ISMI ($p<0.0001$). The only significant independent variables were self-directedness, hope and the subjective evaluation of the mental state (subjCGI). The rest of the factors were eliminated in the process of regression. Thus, self-stigma is mainly negatively connected to hope and self-determination and positively connected to the evaluation of the severity of psychopathology.

Discussion

The prejudices about individuals with mental disorders and related stigma are one of the present issues dealt by mental health experts. Stigma brings the most harmful consequences when being internalized. While some psychiatric patients stigmatize themselves readily, others do not and remain psychologically resilient (Camp *et al* 2002). This is why we tried to identify psychological factors that might be connected to self-stigma. In our study, there were numerous factors significantly correlating with self-stigma. Regression analysis resulted in the identification of three principal factors related to the overall level of self-stigma –

Tab. 3. Mean scores of TCI-R subscales, Hope scale, DES, and rating scales and their correlations with the ISMI.

Measurement	Mean scores + SD	Correlation with ISMi whole score	*p*-value
TCI-R			
Novelty seeking	97.97±15.32	r=0.199 [P]	n.s.
Harm avoidance	119.90±19.06	r=0.64 [P]	*p≤0.0001*
Reward dependence	95.26±13.44	r=−0.28 [P]	*p≤0.05*
Persistence	100.30±22.29	r=−0.47 [P]	*p≤0.0001*
Self directedness	122.10±19.81	r=−0.72 [P]	*p≤0.0001*
Cooperation	123.30±13.92	r=−0.21 [P]	n.s.
Self-transcendence	66.16±15.52	r=0.098 [P]	n.s.
Hope Scale			
Whole score	34.74±11.94	r=−0.68 [P]	*p≤0.0001*
Pathway thinking	18.68±6.24	r=−0.66 [P]	*p≤0.0001*
Agency	16.05±6.82	r=−0.61 [P]	*p≤0.0001*
DES	14.11±13.84	r=0.46 [S]	*p≤0.0001*
DES-T	8.304±12.49	r=0.36 [S]	*p≤0.005*
BAI	23.64±11.96	r=0.30 [P]	*p≤0.05*
BDI-II	25.18±11.47	r=0.54 [P]	*p≤0.0001*
Obj CGI	4.733±1.031	r=0.31 [S]	*p≤0.01*
Subj CGI	4.589±1.223	r=0.38 [S]	*p≤0.005*

Pearson[P] r or Spearman[S] r

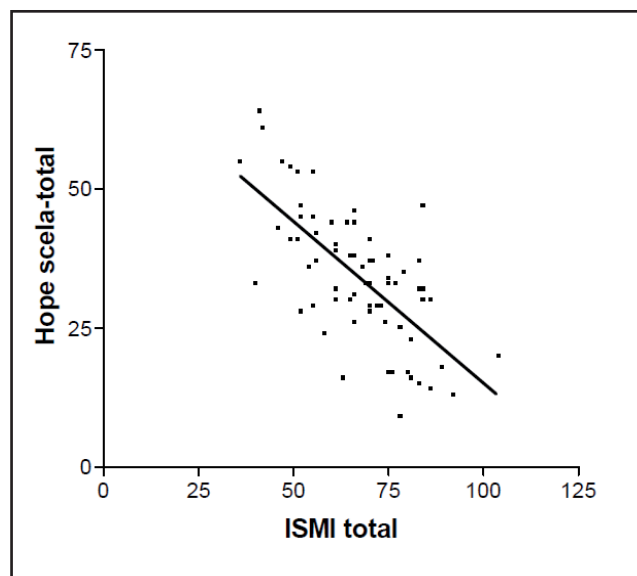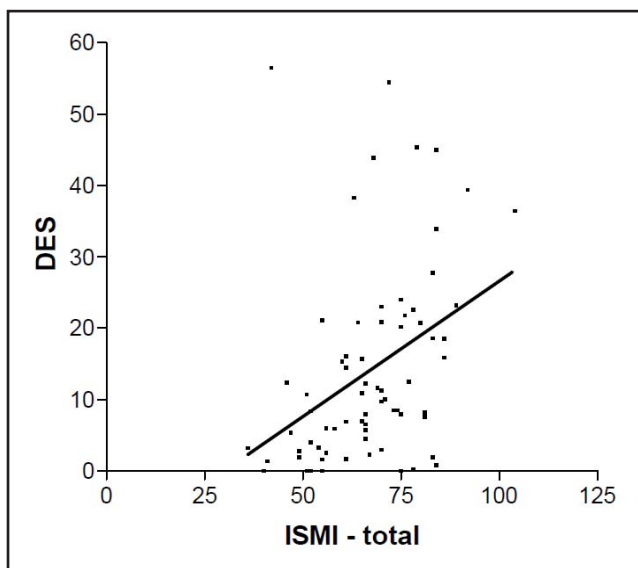**Fig. 1.** A linear regression between ISMI and Hope scale. F= DFn 58.33, DFd=1.000, 67.00; *p*<0.0001

self-directedness (the trait of the Cloninger´s biosocial theory), hope (the concept of Snyder), and the subjective evaluation of one´s own mental state (subjCGI).

Margetić with colleagues (2010) also described the significant relationship between self-stigma and self-directedness. Up to their theory, the individuals with

Tab. 4. ISMI – the mean scores of the whole group and comparisons of the depressive and non-depressive subgroups and the subgroups with and without a personality disorder.

	Mean of the whole group	Patients with depression (n=17)	Patient without depression (n=59)	Unpaired t-test	Patients with personality disorder (n=21)	Patients with personality disorder (n=55)	Unpaired t-test
Overall score	66.78±13.71	75.18±8.77	64.18±13.97	t=3.056 df=70; *p≤0.005*	72.70±12.12	64.50±13.70	t=2.345 df=70; *p≤0.05*
Alienation	15.58±4.33	17.65±3.353	14.95±4.424	t=2.316 df=70; *p≤0.05*	18.00±3.95	14.65±4.14	t=3.111 df=70; *p≤0.005*
Stereotype agreement	13.88±3.47	15.65±2.805	13.36±3.493	t=2.470 df=73; *p≤0.05*	14.48±3.47	13.65±3.47	t=0.9276 df=73; ns
Perceived discrimination	10.53±2.95	11.82±2.531	10.14±2.975	t=2.107 df=71; *p≤0.05*	12.05±2.72	9.96±2.85	t=2.825 df=71; *p≤0.01*
Social withdrawal	13.79±3.97	16.24±3.364	13.05±3.858	t=3.062 df=71; *p≤0.005*	15.00±2.96	13.34±4.22	t=1.613 df=71; ns
Stigma resistance	11.00±2.80	9.412±2.093	11.48±2.828	t=2.789 df=71; *p≤0.01*	10.45±2.86	11.21±2.78	t=1.030 df=71; ns

Fig. 2. A linear regression between ISMI and DES. F= DFn 11.73, DFd=1.000, 69.00; *p<0.001*

higher levels of self-stigma are more prone to blame others or fate for their unhappiness, they lack purpose in their lives and seem to lack inner resources to pursue desired goals. They also suffer from lower self-acceptance and wearing a mask as they feel shame for their mental health problems, they rather act in a socially expected ways than authentically. While significant in the correlation matrix, the correlation between harm avoidance and self-stigma was diminished after entering regression analysis. This finding is not consistent with the results of the study of Margetić with colleagues (2010) who mentioned harm avoidance and self-directedness as two factors significantly contributing to self-stigma after applying multiple regression. The explanation may be that this relationship would not be suppressed if it were just the Cloninger´s personality

traits what entered regression in our study. It is probable that hope was the factor that suppressed the influence of harm avoidance.

The firm relationship between self-stigma and hope has been shown in other studies (Corrigan *et al* 2011; Lysaker *et al* 2007). Despair and hopelessness are emotions related to self-stigma. The significant connection to the Snyder´s concept of hope also suggests that these feelings and self-diminishing thoughts are linked to the decrease in self-esteem. Lower self-esteem is also one of the factors accompanying internalized stigma (Lysaker *et al* 2007; van Zelst *et al* 2014). However, we did not measure it in this study, and it is possible that it would lead to slightly different results.

The third significant factor connected to self-stigma, the severity of psychopathology, has also been supported by findings of other authors (van Zelst *et al* 2014). The causes of this connection might present an inspiration for future research using qualitative methodology.

Both the patients with comorbid depression and those with a comorbid personality disorder showed significantly higher levels of self-stigma. These results are in accordance with findings from the previously published studies that found a strong connection between self-stigma and depression (Ritsher *et al* 2003; Ritsher & Phelan 2004; Vauth *et al* 2007). Others proved that individuals with borderline personality disorder suffer from a higher level of self-stigma than persons with social phobia (Rüsch *et al* 2006). These comorbidities increase the probability that the patient would highly stigmatize himself. It is possible that this readiness to develop self-stigma is one of the factors contributing to a frequently stated poorer treatment efficacy in the patients with axis I disorders with comorbid personality disorders (Shea *et al* 1992; Reich & Vasile 1993). An equivalent relationship seems to exist between comorbid depression in neuroses and treatment efficacy (Maddock & Blacker 1991; Noyes 2001). Although the current

state of knowledge highlights the necessity to address the issue of self-stigma in these patients. The question, which yet remains unanswered, is the causality of this phenomenon. It is probable that the relationships between depression and self-stigma and personality disorders and self-stigma are bidirectional. The identification of the developmental processes of self-stigma in the high-risk patients also poses an important issue for further study and the establishment of more efficient therapeutic programs.

The study has several limitations. The number of participants was relatively small, and some patients did not fulfill all the required items in the test battery. A particular risk poses the use of the psychological methods based on self-evaluation. The use of these scales and questionnaires is conditioned by the ability of introspection of the probands and their willingness to be honest in the statements. Another limitation presents a diffuse character of diagnoses that patients suffered from. The participants were diagnosed with various neurotic disorders, and approximately one-third of them suffered from a comorbid depressive disorder. That why the main objection considers diversity of the sample and sample size. The sample is very heterogeneous and modest in size, considering analyzes made in the study. It includes patients with the whole range of neurotic disorders, with and without depression, also those with multiple comorbidities, and with and without personality disorders. Personality structure in such sample may vary significantly.

Specific diagnostic groups might respond to the intensive treatment differently. Unfortunately, the numbers of the participants in the particular diagnostic units were too small for statistical analyzes. Patients were also treated with various medication. The influence of medication was not explored. In spite of the diagnostic and treatment diversity, self-stigma proves to be a factor significantly connected to the well-being of the patients and needs to be addressed in the clinical treatment, especially while working with the patients with more severe psychopathology.

Conclusion

Patients, who suffer from neurotic disorders and dispose of a higher level of internalized stigma tend to feel hopeless, have the external locus of control a more likely suffer from more severe psychopathology than patients with lower levels of self-stigma. Self-stigma is connected to poorer well-being and might affect treatment efficacy. It is a maladaptive psychosocial factor that needs to be addressed in the therapeutic programs aimed at the treatment of neuroses.

The results of this study might be used to distinguish a correct choice of an optimal therapeutic strategy for the patients suffering from neurotic spectrum disorders. Because the current methods of the treatment cannot help all patients, and a number of them remain

resistant to the treatment, it is necessary to search for alternative therapeutic approaches. These should be aimed especially at patients who suffer from hopelessness, low levels of self-determination, and dispose of higher levels of self-stigma.

REFERENCES

1 Beck AT, Epstein N, Brown G, Steer RA (1988) An Inventory for Measuring Clinical Anxiety: Psychometric Properties. *J Consult Clin Psychol*. **56**(6): 893–897.
2 Beck AT, Steer RA, Ball R, Ranieri W (1996) Comparison of Beck Depression Inventories -I and -II in psychiatric outpatients. *J Pers Assess*. **67**(3): 588–597.
3 Bernstein EM & Putnam FW (1986) Development, reliability, and validity of a dissociation scale. *J Nerv Ment Dis*. **174**(12): 727–735.
4 Camp DL, Finlay WML, Lyons E (2002) Is low self-esteem an inevitable consequence of stigma? An example from women with chronic mental health problems. *Soc Sci Med*. **55**: 823–834.
5 Corrigan PW, Rafacz J, Rüsch N (2011) Examining a progressive model of self-stigma and its impact on people with serious mental illness. *Psychiatry Res*. **189**: 339–343.
6 Corrigan PW, Watson AC, Barr L (2006) Understanding the self-stigma of mental illness. *J Soc Clin Psychol*. **25**: 875–884.
7 EMEA (2002) http://www.ema.europa.eu/pdfs/human/ich/013595en.pdf. 20.3.2009.
8 Farmer RF & Goldberg LR (2008) A psychometric evaluation of the revised temperament and character inventory (TCI-R) and the TCI-140. *Psychol Assess*. **20**(3): 281.
9 Gillespie NA, Cloninger CR, Heath AC, Martin NG (2003) The genetic and environmental relationship between Cloninger's dimensions of temperament and character. *Pers Individ Dif*. **35**: 1931–1946.
10 Guy W, editor (1976) ECDEU Assessment manual for psychopharmacology. Rockville, U.S. DHEW.
11 Hasson-Ohayon I, Kravetz S, Meir T, Rozencwaig S (2008) Insight into severe mental illness, hope, and quality of life of persons with schizophrenia and schizoaffective disorders. *Psychiatry Res*. **167**: 231–238.
12 ICD-10 (1996) Mezinárodní klasifikace nemocí – 10. revize, MKN-10 (1. vydání); Maxdorf Praha.
13 Lecrubier Y, Sheehan DV, Weiller E, *et al* (1997) The MINI international neuropsychiatric interview (M.I.N.I.): a short diagnostic structured interview: reliability and validity according to the CIDI. *Eur Psychiatry*. **12**: 224–231.
14 Livingston JD & Boyd JE (2010) Correlates and consequences of internalized stigma for people living with mental illness: A systematic review and meta-analysis. *Soc Sci Med*. **71**: 2150–2161.
15 Lysaker PH, Roe D, Yanos PT (2007) Toward understanding the insight paradox: internalized stigma moderates the association between insight and social functioning, hope, and self-esteem among people with schizophrenia spectrum disorders. *Schizophr Bull*. **33**: 192–199.
16 Maddock RJ & Blacker KH (1991) Response to treatment in panic disorder with associated depression. *Psychopathology*. **24**: 1–6.
17 Margetić BA, Jakovljević M, Ivanec D, Margetić B, Tošić G (2010.) Relations of internalized stigma with temperament and character in patients with schizophrenia. *Compr Psychiatry*. **51**: 603–606.
18 Noyes R (2001) Comorbidity in generalized anxiety disorder. *Psychiatr Clin North Am*. **1**(1): 41–55.
19 Ociskova M, Prasko J, Dostalova L, Kamaradova D, Latalova K, Kurfurst P, *et al* (2014) Self-stigma in psychiatric patients – standardization of the ISMI scale. *Neuroendocrinol Lett*. **35**(7): 624–632.
20 Ociskova M, Prasko J, Kamaradova D, Grambal A, Latalova K, Sigmundova Z (in press): Relationship between internalized stigma and treatment efficacy in mixed neurotic spectrum and depressive disorders. *Neuroendocrinol Lett*, in press.

21 Pastucha P, Prasko J, Diveky T, Grambal A, Latalova K, Sigmundova Z, Tichackova A (2009a): Borderline personality disorder and dissociation – comparison with healthy controls. *Act Nerv Super Rediviva*. **51**(3–4): 146–149.

22 Pastucha P, Prasko J, Grambal A, Latalova K, Sigmundova Z, Sykorova T, Tichackova A (2009b) Panic disorder and dissociation –comparison with healthy controls. *Neuroendocrinol Lett*. **30**(6): 774–778.

23 Pastucha P, Prasko J, Grambal A, Latalova K, Sigmundova Z, Tichackova A (2009c) Dissociative disorder and dissociation – comparison with healthy controls. *Neuroendocrinol Lett*. **30**(6): 769–773.

24 Prasko J, Raszka M, Adamcova K, Grambal A, Koprivova J, Kudrnovska H, *et al* (2009) Predicting the therapeutic response to cognitive behavioural therapy in patients with pharmacoresistant obsessive-compulsive disorder. *Neuroendocrinol Lett*. **30**(5): 615–623.

25 Preiss M & Klose J (2001) Diagnostika poruch osobnosti pomoci teorie C. R. Cloningera. *Psychiatrie*. **5**: 226–231.

26 Ptacek R, Bob P, Paclt I, Pavlat J, Jasova D, Zvolsky P, *et al* (2007) Psychobiology of dissociation and its clinical assessment. *Neuroendocrinol Lett*. **28**(2): 191–198.

27 Raszka M, Prasko J, Koprivova J, Novák T, Adamcová K (2009) Psychological dissociation in obsessive-compulsive disorder is associated with anxiety level but not with severity of obsessive-compulsive symptoms. *Neuroendocrinol Lett*. **30**(5): 624–628.

28 Reich JH & Vasile RG (1993) Effect of personality disorders on the treatment outcome of axis I conditions: An update. *J Nerv Ment Dis*. **181**: 475–484.

29 Ritsher JB & Phelan JC (2004) Internalized stigma predicts the erosion of morale among psychiatric outpatients. *Psychiatry Res*. **129**: 257–265.

30 Ritsher JB, Otilingam PO, Grajales M (2003) Internalized stigma of mental illness: Psychometric properties of a new measure. *Psychiatry Res*. **121**: 31–49.

31 Ross CA (2007) Borderline personality disorder and dissociation. *J Trauma Dissociation*. **8**: 71–80.

32 Rüsch N, Hölzer A, Hermann C, Schramm E, Jacob GA, Bohus M, *et al* (2006) Self-stigma in women with borderline personality disorder and women with social phobia. *J Nerv Ment Dis*. **194**(10): 76673.

33 Schulze B & Angermeyer MC (2003.) Subjective experiences of stigma: A focus group study of schizophrenic patients, their relatives, and mental health professionals. *Soc Sci Med*. **56**: 299–312.

34 Shea MT, Widinger TA, Klein MH (1992) Comorbidity of personality disorders and depression: Implications for treatment. *J Consult Clin Psychol*. **60**(6): 857–868.

35 Snyder CR, editor (2000) Handbook of Hope: Theory, Measures, & Applications. New York: Academic Press.

36 SPSS Inc. Released (2008) SPSS Statistics for Windows, Version 17.0. Chicago: SPSS Inc.

37 Tsang HW, Fung KM, Chung RC (2010) Self-stigma and stages of change as preditors of treatment adherence of individuals with schizophrenia. *Psychiatry Res*. **180**(1): 10–15.

38 van Zelst C, van Nierop M, Oorschot M, Myin-Germeys I, van Os J, *et al* (2014) Stereotype awareness, self-Esteem and psychopathology in people with psychosis. *PLoS ONE*. **9**(2): e88586.

39 Vauth R, Kleim B, Wirtz M, Corrigan PW (2007) Self-efficacy and empowerment as outcomes of self-stigmatizing and coping in schizophrenia. *Psychiatry Res*. **150**(1): 71–80.

40 Waller NG & Ross CA (1997) The prevalence and biometric structure of pathological dissociation in the general population: Taxometric and behavior genetic findings. *J Abnorm Psychol*. **106**(4): 499–510.

41 Watson S, Chilton R, Fairchild H, Whewell P (2006) Association between childhood trauma and dissociation among patients with borderline personality disorder. *Aust N Z J Psychiatry*. **40**: 478–481.

42 World Health Organisation (1992) ICD-10 Classifications of Mental and Behavioural Disorder: Clinical Descriptions and Diagnostic Guidelines. Geneva: World Health Organisation.