Self-stigma in psychiatric patients – standardization of the ISMI scale

ORIGINAL ARTICLE

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Abstract

OBJECTIVE: Self-stigma in psychiatric patients is an issue deserving both research and therapeutic attention. The objective of the present study was to evaluate the psychometric properties of a Czech version of the Internalized Stigma of Mental Illness (ISMI) scale assessing the levels of self-stigma in individuals with mental disorders.

METHODS: It consists of 29 items classified into 5 subscales, namely alienation, stereotype endorsement, perceived discrimination, social withdrawal and stigma resistance. The study group comprised 369 patients with a mean age of 41.5±13.3 years, of whom 210 (56.6%) were females.

RESULTS: The most frequent diagnosis was neurotic disorders (46.1%), followed by affective disorders (18.4%), substance use disorders (13.3%), psychotic disorders (10.8%), personality disorders (9.5%) and organic disorders (1.6%). Reliability of the scale was evaluated by internal consistency analysis (α=0.91), the split-half method (Spearman-Brown coefficient: 0.93) and test-retest at 3 weeks from the first measurement (N=17; r=0.90, $p<0.05$).

CONCLUSION: Exploratory factor analysis of the scale was performed, its validity was verified and norms were established that were based on T-scores and sten scores for the entire scale and individual subscales. The Czech translation of the ISMI has adequate psychometric properties.

INTRODUCTION

Stigma is a social process in which individuals are recognized and devalued because, in some way, they deviate from mainstream society. Because of this deviation, they are discredited by society and considered inferior, morally depraved or dangerous. The traditional causes of stigma are belonging to a different race, minority ethnic group, nationality, religion, sexual orientation or having a

mental disorder. Stigma has numerous negative impacts on the person affected (Goffman 1986; Finzen 2000). In the eyes of the public, psychiatric patients are unreliable, unpredictable and dangerous (Nawka *et al.* 2012; Nawková *et al.* 2012; Graves *et al.* 2005); as such, they become victims of discrimination (Gray 2005). Due to prejudices of others, their life chances are limited. They have fewer opportunities for employment, housing and partnerships or friendships. The negative effects stigma has on psychiatric patients are so significant that Finzen (2000) even called it "a second illness", one that aggravates the suffering brought about by mental disease. However, not every psychiatric patient suffers from stigma and some of the sufferers manage to hold it off (Camp *et al.* 2002). Yet many psychiatric patients are tormented by stigma. They uncritically adopt social stereotypes, agree with them and apply them to themselves. As a result, they feel certain about their inferiority, "defectiveness" and irreversibility of their suffering (Corrigan & Watson 2002; Ritsher & Phelan 2004). This phenomenon is known as *internalized stigma* (or *self-stigma*).

Both discrimination and self-stigma lead to social isolation. Stigmatized patients engage in avoidant behavior in order to try to prevent the anticipated hurtful behavior of others (Corrigan & Watson 2002). Avoidant behavior, in turn, makes anxiety worse and may turn into social phobia (Yanos 2008). Excessive avoidance also causes other limitations to life chances (Corrigan & Watson 2002; Schulze & Angermeyer 2003). Self-stigma results in decreased quality of life, lowered self-esteem as well as increased dysphoric emotions and helplessness (Livingston & Boyd 2010). In an effort to cope with stigma, patients often use maladaptive coping strategies, such as increased intake of alcohol or anxiolytics (Ocisková *et al.* 2014). Self-stigma alters their self-concept. They become identified with social stereotypes to such an extent that they start to behave in accordance with them; other characteristics that are not in agreement with stereotypes about psychiatric patients (e.g. me as a loving father and husband, hardworking employee, energetic person who loves to spend time with friends) are understated (Schulze & Angermeyer 2003). In mental health, self-stigma is associated with low adherence to therapy, more severe symptoms and poor prognosis (Ritsher & Phelan 2004).

FOREIGN METHODS USED TO ASSESS THE DEGREE OF INTERNALIZED STIGMA

In 2012, Steveling et al. published a study assessing psychometric properties of psychodiagnostic methods concerned with internalized stigma. Through a search in the PubMed, PsycINFO and WorldCat databases and personal communications with experts on self-stigma, they identified 21 instruments to measure internalized stigma in patients with HIV/AIDS, leprosy, epilepsy, tuberculosis, mental illness, cancer, asthma or obesity.

The authors identified six scales for assessing internalized stigma in individuals suffering from mental illness (Ocisková *et al.* 2014):

- The *Internalized Stigma of Mental Illness* (ISMI) scale measures the level of self-stigma in individuals with mental disorders. It contains 29 items classified into 5 subscales – endorsement of stereotypes about patients suffering from mental illness, alienation, perceived discrimination, social withdrawal and stigma resistance (Ritsher *et al.* 2003).
- The *Self Stigma of Mental Illness Scale* (SSMIS) was developed by Corrigan *et al.* (2006) to assess the levels of perceived stigma and self-stigma. The scale encompasses 60 items in 4 subscales – awareness of the stereotypes, agreement with them, applying them to oneself, and suffering from negative consequences of self-stigma.
- The short version *Self-Stigma Scale* (SSS-S) is a 9-item instrument for use in minorities, namely persons with mental illness or HIV/AIDS and immigrants (Mak & Cheung 2010).
- The *Depression Self-Stigma Scale* (DSSS) is a 32-item instrument used to measure self-stigma in individuals suffering from depression (Kanter *et al.* 2008).
- The *Self-Stigma of Depression Scale* (SSDS) is a similar instrument to be used in patients with depression; it contains 16 items (Barney *et al.* 2010).
- The *Self-Stigma Scale* is a 5-item scale intended to measure the level of self-stigma in adolescents affected by mental illness (Moses 2009).

According to Steveling *et al.* (2012), the best currently available method assessing the level of self-stigma in individuals suffering from mental illness is the ISMI scale by Boyd (formerly Ritsher *et al.* (2003)).

ISMI

The ISMI scale was created by Jennifer Boyd and co-workers (2003) following an extensive literature review and focus group discussions with psychiatric patients. This is a self-assessment scale used to measure self-stigma in individuals affected by mental illness. It comprises 29 items in 5 subscales, namely alienation (6 items), stereotype endorsement (7), perceived discrimination (5), social withdrawal (6) and stigma resistance (5).

The *Alienation* subscale measures the patient's experience of being less than a full member of or being excluded from society due to his or her illness. The *Stereotype Endorsement* subscale measures the degree to which the individual agrees with widely accepted stereotypes about people with mental illness. The *Perceived Discrimination* subscale is concerned with the patient's perception of the way other people treat him or her assuming they know about his or her mental illness. The *Social Withdrawal* scale was inspired by statements produced by focus group members who claimed

that they avoid contacts with others not to burden them with their mental problems or because they fear rejection in case people around them learn about the mental illness. The *Stigma Resistance* subscale determines the degree to which the patient is able to be unaffected by self-stigma (Ritsher *et al.* 2003). Each item is rated by respondents on a 4-point Likert scale ("strongly disagree", "disagree", "agree" and "strongly agree"). The questionnaire form may be filled in by respondents on their own. Given the sensitivity of these issues, however, it is advisable that a professional ready to answer any questions is present. It takes 5 to 10 minutes to complete the scale.

Boyd Ritsher *et al.* (2003) verified the basic psychometric properties of the instrument on a sample of 127 mental health outpatients suffering from depression or psychotic illness with possible comorbid depression, anxiety disorder, addictive disorder or personality disorder. The mean age was 49.5 years and the participants were mainly males (N=117). The ISMI had very good overall internal consistency and correlation as shown by test-retest reliability measurement in 16 participants 6 weeks later. Cronbach's alpha and test-retest correlation for both the entire scale and all subscales are shown in Table 1.

The level of internal consistency was satisfactory in all subscales, with the exception of the Stigma Resistance subscale. The test-retest coefficients were also very good. The only exception was the Alienation subscale with the coefficient just below the acceptability threshold. Construct validity was also tested. As expected, the authors found significant correlations between the ISMI and scales measuring similar constructs (Rosenberg Self-Esteem Scale, Perceived Devaluation-Discrimination Scale, Boston University Empowerment Scale, Personal Empowerment Scale and Recovery Assessment Scale). There was a moderate correlation between the ISMI and the Center for Epidemiological Studies – Depression scale (r=0.53, *p*<0.01). Subsequently, factor analyses were carried out in only 4 subscales, with the Stigma Resistance subscale being dropped. Out of the remaining 24 items, thirteen sorted onto the expected factor and the rest of those having their strongest loadings on other factors had their second highest loading on the expected factor (Ritsher *et al.* 2003).

RESEARCH OBJECTIVE

Internalized stigma in psychiatric patients is an issue deserving both research and therapeutic attention. A better understanding in this area and introduction of effective destigmatization methods may be achieved by customizing the self-stigma assessment scale for the local conditions. The instrument was first translated into the Czech language as part of research on self-stigma in patients with depression or bipolar affective disorder conducted by the Global Alliance of Mental

Tab. 1. Reliability of the original ISMI version (Boyd Ritsher *et al.* 2003).

		Internal consistency	Test-retest
		α	r
Entire scale		0.90	0.92*
Subscales	Alienation	0.79	0.68*
	Stereotype Endorsement	0.72	0.94*
	Perceived Discrimination	0.75	0.89*
	Social Withdrawal	0.80	0.89*
	Stigma Resistance	0.58	0.80*

*p<0.05

Illness Advocacy Networks (GAMIAN-Europe). However, we were unable to obtain the translation from the organization. Moreover, the study authors did not standardize their translations and only verified their internal consistency and some areas of validity which seemed insufficient for our purposes (Brohan *et al.* 2011). Therefore, the objectives of the present study were to customize the ISMI scale for use in the Czech Republic, verify its psychometric properties and establish norms for interpretation of resulting scores.

METHODS

Subjects

Included in the study were 369 patients attending the psychiatric outpatient center of the University Hospital Olomouc Department of Psychiatry or hospitalized in the department's psychotherapy ward between November 2012 and February 2014. The group comprised 210 females (56.6%) and 159 males (43.1%). The mean age was 41.5 years (range, 18–85 years; SD=13.3 years). The greatest proportion of patients were those with secondary education (N=139; 37.7%), followed by vocational (N=108; 29.3%), tertiary (N=83; 22.5%) and primary (N=39; 10.5%) education. As for their employment status at the time of data collection, nearly a half of the patients were employed or self-employed (N=171; 46.3%), others were unemployed (N=97; 26.3%), receiving a disability pension for both mental and other conditions (N=50; 13.6%) or an old age pension (N=30; 8.1%) and students (N=16; 4.3%). The employment status of 5 participants (1.4%) was not specified.

The patients' diagnoses were made in accordance with the 10th revision of the International Classification of Diseases (MKN 1996). The most frequent diagnosis was neurotic disorders (N=171; 46.1%), followed by affective disorders (N=68; 18.4%), substance use disorders (N=49; 13.3%), psychotic disorders (N=40; 10.8%), personality disorders (N=35; 9.5%) and organic disorders (N=6; 1.6%). At the time of data collection, the participants' condition was stable. All of them were

in remission and required no changes in medication or treatment approach. The research was conducted in accordance with the Declaration of Helsinki and Guideline for Good Clinical Practice (EMEA 2002) and approved by the local ethics committee.

Administration of the ISMI

At the beginning of their psychiatric examination, the patients were approached and asked to participate in the study. They gave written informed consent and then filled in the following self-assessment questionnaires: the ISMI, Beck Depression Inventory (BDI-II) and subjective Clinical Global Impression (CGI). The ISMI scale was administered in accordance with the original instruction: "We are going to use the term "mental illness" in the rest of this scale, but please think of it as whatever you feel is the best term for it. For each question, please mark whether you strongly disagree (1), disagree (2), agree (3), or strongly agree (4)." The patients received no financial remuneration for partici-

Tab. 2. Arithmetic means of the ISMI scale and its subscales for the entire group and subgroups and differences between them.

ISMI	Total score	Alienation	Stereotype Endorsement	Perceived Discrimination	Social Withdrawal	Stigma Resistance
All patients	63.55±14.36	13.81±4.22	13.69±5.55	10.16±3.33	12.95±4.00	12.40±2.65
Gender						
Males	62.97±13.79	13.55±3.90	13.65±3.42	9.94±3.28	12.87±4.00	12.62±2.46
Females	63.88±14.75	13.99±4.44	13.69±3.64	10.30±3.36	12.98±4.00	12.22±2.78
Unpaired t-test	t = −0.599 df = 364; ns	t = −0.979 df = 364; ns	t = −0.116 df = 365; ns	t = −1.054 df = 365; ns	t = −0.270 df = 365; ns	t = 1.498 df = 365; ns
Age						
Correlation: Spearman's coefficient	0.019; ns	0.035; ns	0.001; ns	0.049; ns	0.004; ns	−0.083; ns
Diagnostic category						
Organic disorders	67.14±11.19	14.43±2.26	14.71±3.30	10.71±3.20	14.14±3.63	12.00±3.06
Substance use disorders	63.65±13.61	13.65±4.07	13.60±3.04	10.27±3.55	12.98±3.48	12.75±2.66
Psychotic disorders	65.73±12.32	14.13±3.63	14.80±3.20	11.03±3.19	13.40±3.43	12.38±1.84
Affective disorders	61.90±14.20	13.31±4.50	13.25±3.28	9.82±3.25	12.75±4.42	11.66±2.53
Neurotic disorders	63.21±15.44	13.77±4.32	13.52±3.85	10.01±3.42	12.79±4.24	12.76±2.69
Personality disorders	65.03±13.24	14.71±4.31	13.97±3.51	10.31±2.92	13.31±3.41	11.71±3.04
Among-group variance (ANOVA)	Welch: F = 0.723 df = 5; ns	Welch: F = 0.643 df = 5; ns	Kruskal–Wallis: χ^2 = 2.155 df = 5; ns	Welch: F = 1.024 df = 5; ns	Welch: F = 0.556 df = 5; ns	Welch: F = 2.405 df = 5; **p<0.05**
Education level						
Primary	64.51±13.41	14.28±4.35	13.64±3.56	11.08±3.53	13.28±3.35	12.23±2.22
Vocational	63.42±14.71	13.78±4.37	13.61±3.60	9.98±3.42	12.74±3.86	12.95±2.56
Secondary	63.97±14.76	14.00±4.32	13.87±3.63	10.09±3.22	13.10±4.23	12.09±2.70
Tertiary	62.55±13.82	13.31±3.77	13.49±3.38	10.08±3.29	12.82±4.13	12.29±2.78
Among-group variance (ANOVA)	Welch : F = 0.232 df = 3; ns	Kruskal–Wallis: χ^2 = 0.994 df = 3; ns	Kruskal–Wallis: χ^2 = 0.886 df = 3; ns	Kruskal–Wallis: χ^2 = 2.988 df = 3; ns	Kruskal–Wallis: χ^2 = 0.875 df = 3; ns	Kruskal–Wallis: χ^2 = 5.842 df = 3; ns
Employment status						
Employed + self-employed	63.96±14.34	13.94±4.21	13.74±3.43	10.13±3.25	13.13±3.99	12.43±2.86
Unemployed	64.02±13.03	14.19±4.06	13.66±3.33	10.27±3.00	12.99±3.67	12.28±2.45
Disability pensioners	65.41±15.34	13.94±4.36	14.20±4.14	10.92±3.88	13.18±4.19	12.82±2.40
Students	62.63±13.22	13.44±3.60	14.31±3.16	9.81±3.08	12.50±4.31	12.44±2.19
Old age pensioners	57.53±16.86	12.00±4.54	12.30±4.00	9.10±3.97	11.90±4.66	11.70±2.44
Among-group variance (ANOVA)	Welch: F = 1.607 df = 4; ns	Welch: F = 1.675 df = 4; ns	Welch: F = 1.545 df = 4; ns	Welch: F = 1.463 df = 4; ns	Welch: F = 0.688 df = 4; ns	Welch: F = 0.891 df = 4; ns

pating in the study. Their main motivation was to help with the research.

The instrument was translated into the Czech language by Lenka Dostálová. Another translation and a back translation into English were made by Pavel Kurfürst. A preliminary version was sent for approval to Jennifer Boyd Ritsher, the scale author. She suggested that several changes be made to the wording of the items. Subsequently, the scale was finalized.

BDI-II

The second edition of the Beck Depression Inventory contains 21 items. For each, the respondent selects one response option that he or she considers most relevant. In the Czech Republic, the method was standardized by Preiss and Vacíř (1999).

CGI

The Clinical Global Impression is an instrument for overall assessment of the severity of a psychopathology. The subjective version of the CGI (CGI-S) was used, with the patients self-rating their overall mental condition on a 1–7 scale; each severity degree has descriptive characteristics (Guy 1976).

RESULTS

Descriptive analysis

Table 2 shows the mean scores of the ISMI scale and its subscales for the entire group and subgroups, together with assessment of significance of differences between them. There were no significant differences across genders, education levels or employment statuses. The overall level of self-stigma and its components did not correlate with age either. The only statistically significant differences between diagnostic subgroups of patients was noted for the Stigma Resistance subscale. Here, the Games-Howell post hoc test revealed a statistically significant difference in the level of stigma resistance between patients with affective disorder and those with neurotic disorders (mean difference =−1.10; sig. 0.039 $p<0.05$). This means that patients with affective disorders (i.e. depression or bipolar affective disorder) had the lowest level of resistance to self-stigma of all patient groups. By contrast, participants with neurotic disorders showed the highest mean levels of stigma resistance. As seen from the mean levels in both groups (Table 2) or results of the post hoc analysis, the difference is negligible. This fact is supported by results of a power analysis showing a small difference (effect size f=0.22).

Reliability of the ISMI

Reliability of the scale was primarily evaluated by internal consistency analysis. Cronbach's alpha was identified for the entire scale and subscales (Table 3). Subsequently, item analysis of the scale was performed. Inter-item correlations ranged from 0.05 to 0.769. Four items reduced the internal consistency of the scale.

Those were items 7, 24, 26 and 27, representing 4 out of 5 items in the Stigma Resistance subscale. As seen from Table 3, it was this subscale that showed the lowest internal consistency and stability in time. If it had been omitted, the internal consistency of the scale would have increased to 0.92. The other internal consistency levels were acceptable to excellent. Stability of the scale in time, or test-retest reliability, was also assessed. The second measurement was performed at 3 weeks from the first one in 17 participants. Then, reliability was evaluated using the split-half method, with the items being divided into odd and even. Once again, this parameter was excellent (Spearman-Brown coefficient: 0.93).

Factor analysis of the ISMI

Exploratory factor analysis was used to test the structure of the scale. As in the study by Boyd Ritsher *et al.* (2003), factors were extracted using the maximum likelihood method and varimax rotation with Kaiser normalization. Four factors were identified that explained 49.8% of the variance. In contrast to the expected distribution, the Alienation and Social Withdrawal subscales constituted a single factor. The remaining three subscales loaded on separate factors. Leaving aside the combination of two subscales into one factor, 22 out of the total 29 items fell into the "correct" factors. The remaining 7 items sorted onto significantly different factors than expected. However, they had their second highest loading on the originally expected factors. Those were 3 and 4 items in the Stereotype Endorsement and Perceived Discrimination subscales, respectively.

Validity of the ISMI

A method similar to the ISMI has not yet been implemented in the Czech Republic. Therefore, to test its validity, the ISMI was compared with the well-established BDI-II and CGI scales. This part of the study comprised 109 out of all 369 participants. The results are shown in Table 4.

As expected, both the overall level of self-stigma and its components were statistically significantly

Tab. 3. Reliability of the Czech translation of the ISMI.

		Internal consistency		Test-retest	
		N	α	N	r
Entire scale		352	0.91	17	0.90**
Subscales	Alienation	369	0.85	17	0.94**
	Stereotype Endorsement	368	0.75	17	0.86**
	Perceived Discrimination	367	0.87	17	0.92**
	Social Withdrawal	368	0.87	17	0.91**
	Stigma Resistance	354	0.60	17	0.57*

*$p<0.05$; **$p<0.001$

Tab. 4. Correlations between the BDI-II, CGI and ISMI.

ISMI	Total score	Alienation	Stereotype Endorsement	Perceived Discrimination	Social Withdrawal	Stigma Resistance
BDI-II						
Correlation: Spearman's coefficient	0.607*	0.522*	0.582*	0.460*	0.513*	−0.353*
CGI-S						
Correlation: Spearman's coefficient	0.412*	0.436*	0.349*	0.337*	0.400*	−0.223*

*$p<0.001$

Tab. 5. Norms for the ISMI total score.

ISMI total score					
Raw score	T-score	Raw score	T-score	Raw score	T-score
29	26	59	47	89	68
30	27	60	48	90	68
31	27	61	48	91	69
32	28	62	49	92	70
33	29	63	50	93	71
34	29	64	50	94	71
35	30	65	51	95	72
36	31	66	52	96	73
37	32	67	52	97	73
38	32	68	53	98	74
39	33	69	54	99	75
40	34	70	54	100	76
41	34	71	55	101	76
42	35	72	56	102	77
43	36	73	57	103	77
44	36	74	57	104	78
45	37	75	58	105	79
46	38	76	59	106	80
47	38	77	59	107	80
48	39	78	60	108	81
49	40	79	61	109	82
50	41	80	61	110	82
51	41	81	62	111	83
52	42	82	63	112	84
53	43	83	64	113	84
54	43	84	64	114	85
55	44	85	65	115	86
56	45	86	66	116	87
57	45	87	66		
58	46	88	67		

correlated with the severity of depressive symptoms. This is consistent with findings in foreign studies that used the original ISMI (Ritsher *et al.* 2003; Batinic *et al.* 2013). Moreover, we found a moderate positive correlation between the overall level of self-stigma and subjectively perceived severity of mental disease. Statistically significant correlations were also observed in all ISMI subscales. This corresponds to findings by Boyd Ritsher and Phelan (2004) on a close association between the severity of a psychopathology and the level of self-stigma.

Norms

The last step was establishing norms for both the ISMI scale and its subscales. Taken into account was the fact there were no significant differences in self-stigma across gender, age, mental illness categories, education and employment. Given the relatively high variance of potential values of the scale, norms based on T-scores were selected for the resulting scores for the entire scale (Table 5). T-score values ranging from 40 to 60 were considered the mean. Values below 40 or above 60 suggested significantly lower or higher self-stigma, respectively.

Despite the discrepancies in reliability and factor analysis, norms were produced for all the subscales. Given the potentially low variance of values, the norms are based on sten scores (Table 6).

The Stigma Resistance subscale appears problematic. We leave it up to potential users to decide whether or not they will interpret the subscale using sten scores. Another potential problem is that in our translated version, the Alienation and Social Withdrawal subscales constituted a single factor. Despite the undisputed similarity of the two subscales we assume that this fact was not an obstacle to the production of norms for each of them. The mean values, or sten scores, for the subscales range from 4 to 6; scores outside the range are indicative of a significantly different patient's result as compared with the psychiatric population.

Scoring

When evaluating the ISMI, the total score of the scale and scores of the subscales are calculated as follows:

Tab. 6. Norms for the ISMI subscales.

SUBSCALES									
Alienation		**Stereotype Endorsement**		**Perceived Discrimination**		**Social Withdrawal**		**Stigma Resistance**	
Raw score	Sten score	Raw score	Sten score	Raw score	Sten score	Raw score	Sten score	Raw score	Sten score
6	1	7	1	5	1	6	2	5	1
7	2	8	2	6	2	7	2	6	1
8	2	9	2	7	2	8	3	7	1
9	3	10	3	8	3	9	3	8	2
10	3	11	3	9	4	10	4	9	2
11	4	12	4	10	5	11	4	10	3
12	4	13	5	11	6	12	5	11	4
13	5	14	5	12	6	13	5	12	5
14	5	15	6	13	7	14	6	13	5
15	6	16	6	14	7	15	6	14	6
16	6	17	7	15	8	16	7	15	7
17	7	18	7	16	9	17	7	16	8
18	7	19	8	17	9	18	8	17	8
19	7	20	9	18	10	19	8	18	9
20	8	21	9	19	10	20	9	19	10
21	8	22	10	20	10	21	9	20	10
22	9	23	10			22	10		
23	10	24	10			23	10		
24	10	25	10			24	10		
		26	10						
		27	10						
		28	10						

First, the subscale scores are calculated. Here is the list of subscales and numbers of items that constitute them:
- Alienation – items 1, 5, 8, 16, 17, 21;
- Stereotype Endorsement – items 2, 6, 10, 18, 19, 23, 29;
- Perceived Discrimination – items 3, 15, 22, 25, 28;
- Social Withdrawal – items 4, 9, 11, 12, 13, 20;
- Stigma Resistance – items 7, 14, 24, 26, 27.

While completing the scale, the patient marks one of four possible response options that he or she considers most relevant. Then the item scores for each subscale are summed to form raw scores for individual subscales. These may be transferred into standardized sten scores (see Table 6) so that the individual's results may be compared with those of a wider population of psychiatric patients.

Subsequently, the total ISMI score is calculated. Unlike the other subscales, the Stigma Resistance subscale is reverse scored. Therefore, scores for individual items in this subscale have to be transferred as follows:

If the patient marked the number 1, the reverse score is 4, and vice versa. If the patient marked the number 2, the reverse score is 3, and vice versa.

All the Stigma Resistance subscale items have to be inverted before calculation of the whole score of the scale. It must also be noted that this subscale has to be inverted only when the total score of the scale is calculated and not when summing the score for the subscale. After all Stigma Resistance subscale items are inverted, they are simply added to scores of the remaining subscales to calculate the whole score of the ISMI scale. The resulting ISMI raw score may be transferred to a standardized value, or T-score, using Table 5.

DISCUSSION

Stigma and self-stigma of psychiatric patients is a persistent issue in current psychiatry and clinical psychology. In addition to qualitative studies, providing a deep insight into experiences of particular patients and the development of this negative social phenom-

enon, quantitative studies providing a different point of view should be carried out as well. Until recently, no self-stigma assessment instrument with verified psychometric properties and established norms was available in our country. Therefore, a decision was made to customize the ISMI, a long-established foreign scale (Stevelink *et al.* 2012; Ritsher *et al.* 2003).

The instrument was translated into the Czech language by Lenka Dostálová and Pavel Kurfürst. The latter translator also did a back translation into English. A preliminary version was consulted with Jennifer Boyd Ritsher, the author of the original scale, who suggested a few minor changes. After the adjustments were made she approved the translation for publishing. The psychometric properties of the Czech translation were satisfactory and in most cases, they were as good as, or even better than, those of the original version.

A psychometrically less sound component of the instrument is the Stigma Resistance subscale that showed inadequate internal consistency and stability in time. Although we considered its exclusion from the scale a decision was made to leave it up to the users to decide whether or not they will interpret the subscale. Therefore, norms were established for the entire scale and not only for 4 subscales which was a potential option. It must be noted that there are likely to be shortcomings in the construction of the Stigma Resistance subscale as a similar decrease in its reliability was also reported by Boyd Ritsher *et al.* (2003). Another drawback was the factor analysis result showing that the Alienation and Social Withdrawal subscales constituted a single factor. These concepts seem to be very similar. This situation is reminiscent of a study by Corrigan *et al.* (2011) who found that in their method based on 4 subscales, two subscales merged into a single factor. Those subscales were application of perceived stereotypes to one's self and negative effects of self-stigma. As Corrigan *et al.* did not make any changes to the scale we decided to assume the same attitude, assessing the two subscales separately. Moreover, factor analysis revealed 7 items that primarily did not sort onto "their" factors. The study by Boyd Ritsher *et al.* (2003) even reported 9 such items. The above facts are suggestive of certain shortcomings in the scale construction. Yet Stevelink et al. (2012) recommended the ISMI as the best self-stigma assessment instrument currently available for use in psychiatric patients.

It must be also said that in some steps assessing the psychometric properties of the translation, only a proportion of the participants were involved. Validity was tested with 109 patients and test-retest was performed in 17 individuals in whom the data showed Gaussian distribution. Correlations between the test and retest scores and self-stigma and depression severity were also consistent with data reported by Boyd Ritsher *et al.* (2003). Thus, the lower numbers of patients in some steps of the assessment did not seem to distort the results of the analyses.

The study was performed exclusively in outpatients or psychotherapy ward inpatients. The question is whether other patient groups would influence the norms or psychometric properties of the scale. When selecting the groups of patients to whom the instrument will be administered it is necessary to ensure that it is correctly filled in. Therefore, certain patients would be excluded such as those with acute psychosis, a lack of motivation or significant cognitive impairment. As a result, the norms cannot be generalized to the entire population of Czech psychiatric patients.

Despite the above standardization shortcomings, the overall reliability and validity of the method are satisfactory. The shortcomings mainly stem from the scale construction itself. Yet, as stated by Stevelink *et al.* (2012), the ISMI is the best self-stigma assessment instrument that is currently available. Given the above deficits, the scale should be used with caution in patients in unstable condition and when interpreting the Stigma Resistance subscale. The main use of the scale is in research.

CONCLUSION

Patients suffering from mental illness remain stigmatized in our society. In the eyes of the public, they are perceived as unreliable, unpredictable or even dangerous (Nawka *et al.* 2012). Some individuals with mental illness adopt social stereotypes and apply them to themselves. As a result, they experience lower self-esteem and social withdrawal, tend to avoid necessary treatment or do not comply with it (Corrigan & Watson 2002; Ritsher & Phelan 2004; Livingston & Boyd 2010). This negative phenomenon is referred to as self-stigma. This is an issue that needs attention. Until recently, no standardized self-stigma assessment instrument for patients with mental illness, allowing further development of research and therapeutic options in this area, was available in the Czech Republic. Therefore, we translated the ISMI scale, verified its reliability, internal structure and validity and established norms. The customized scale is mainly intended for research purposes.

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