

Development of Self-Stigma Inventory for Families of the patients with schizophrenia (SSI-F): validity and reliability study

Mustafa Yıldız, Aysel İncedere, Fatma Kiras, Fatma Betül Abut, Ayşe Kırçalı & Kübra İpçi

To cite this article: Mustafa Yıldız, Aysel İncedere, Fatma Kiras, Fatma Betül Abut, Ayşe Kırçalı & Kübra İpçi (2019) Development of Self-Stigma Inventory for Families of the patients with schizophrenia (SSI-F): validity and reliability study, Psychiatry and Clinical Psychopharmacology, 29:4, 463-471, DOI: [10.1080/24750573.2018.1480858](https://doi.org/10.1080/24750573.2018.1480858)

To link to this article: <https://doi.org/10.1080/24750573.2018.1480858>



© 2018 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 04 Jun 2018.



Submit your article to this journal [↗](#)



Article views: 1811



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 4 View citing articles [↗](#)

Development of Self-Stigma Inventory for Families of the patients with schizophrenia (SSI-F): validity and reliability study

Mustafa Yıldız^a, Aysel İncedere^b, Fatma Kiras^a, Fatma Betül Abut^{b,c}, Ayşe Kırçalı^b and Kübra İpçi^b

^aDepartment of Psychiatry, Kocaeli University School of Medicine, Kocaeli, Turkey; ^bDepartment of Psychosocial Rehabilitation, Kocaeli University Institute of Health Science, Kocaeli, Turkey; ^cDepartment of Psychology, Kocaeli University Faculty of Art and Sciences, Kocaeli, Turkey

ABSTRACT

OBJECTIVE: It is known that relatives of the patients with schizophrenia tend to hide the illness from other people, are ashamed of their patients, and feel excluded from society. This situation is referred as self-stigmatization of families, and it may negatively affect the family functioning and therapeutic alliance. Assessing and evaluating the self-stigma of families are essential concerning family therapies and treatment of their patients. The purpose of this study is to develop a culturally sensitive inventory for the assessment of self-stigmatization for families of patients with schizophrenia in Turkey.

METHODS: After examining the studies in the related field and conducting a focus group interview with the families of the patients with schizophrenia, a 19-item inventory was formed. One hundred and six relatives of the patients with schizophrenia and schizoaffective disorder were given a sociodemographic form, Self-Stigma Inventory for Families (SSI-F), Beck Depression Inventory (BDI), Beck Hopelessness Scale (BHS), Rosenberg Self-Esteem Scale (RSES), and Zarit Caregiver Burden Scale (ZCBS). Explanatory factor analysis and convergent validity were assessed as validity analysis, and internal consistency coefficient, item–total correlation, and test–retest reliability were calculated for reliability analysis.

RESULTS: The sample consisted of 106 relatives whose 52% were female, 77% were married, mean age was 51 years, and level of education was 9 years. In explanatory factor analysis, three factors (social withdrawal, concealment of the illness, and perceived devaluation) with 14 items were detected, and the factors could explain 66.8% of the total variance. SSI-F was significantly correlated with Beck Depression Inventory ($r = 0.48, P < 0.01$), Beck Hopelessness Scale ($r = 0.27, P < 0.01$), Zarit Caregiver Burden Scale ($r = 0.54, P < 0.01$), and Rosenberg Self-Esteem Scale ($r = -0.35, P < 0.01$). Cronbach's alpha coefficient for SSI-F total score was calculated as 0.88, and test–retest reliability coefficient of SSI-F was 0.93.

CONCLUSIONS: This study shows that the SSI-F is a valid and reliable instrument for assessing self-stigmatization in the families of patients with schizophrenia. It can be considered as a valuable instrument to use for research and therapeutic purposes.

ARTICLE HISTORY

Received 15 April 2018
Accepted 22 May 2018

KEYWORDS

Schizophrenia; family; self-stigma; validity; reliability; Self-Stigma Inventory for Families (SSI-F)

Introduction

Stigmatization is defined as making a disrespectful attribution to an individual or ascribing disgraceful and discreditable characteristics, without reflecting the reality, by the society since the person is considered as outside of the criteria that the community accepted as “normal” [1,2]. Patients with schizophrenia are generally regarded as “dangerous” and “unpredictable” individuals or as “outcasts,” hence they face stigma frequently [3,4]. Stigmatization takes place in cognitive, emotional, and behavioural processes. First, stereotypes about mental illnesses emerge (e.g. patients are dangerous, they cannot look after themselves, a patient is an unknown quantity), then these negative stereotypes become stronger and turn into prejudiced behaviours, and consequently negative emotions (e.g. fear, disgust) appear. As a result, discrimination occurs

through casting out of society [5,6,7]. Stigmatization constitutes a critical and secondary problem in addition to the disease especially for the individuals with severe mental illnesses such as schizophrenia. Experiencing stigma lowers the individuals' self-confidence, hinders their abilities to reach their targets, causes to miss social opportunities, and reduces their quality of live [5].

Mental illness and stigmatization are such blended terms that not just mentally ill patients are affected by the stigmatization, but the family members of the patients are also affected [8–11]. Beliefs about that inadequate parenting skills and detrimental environmental conditions provoke mental illnesses and the knowledge about the effects of heredity [12–14] might cause family members of the patients to hold themselves responsible for the illness and the poor

CONTACT Mustafa Yıldız  myildiz60@yahoo.com  Department of Psychiatry, Kocaeli University School of Medicine, Kocaeli, Turkey

© 2018 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

prognosis. On the one hand, family members feel responsible for their relatives' illnesses, on the other hand, they exposed to negativistic attitudes from their environment and start to blame themselves. Difficulties of being a relative of a patient with schizophrenia and the psychosocial troubles are revealed through qualitative and quantitative studies [15–19]. In fact, some family members feel as if they have committed a disgraceful act and steer away from their social environments.

Family members are aware of that not only their patients are stigmatized, but also they are subjected to social stigma and devaluation as well [8,9,11,20]. While this awareness causes some family members to strive with and grow stronger, it creates some others to internalize the stigma and leads self-stigmatization. Then, by internalizing the social stigma, the individual embraces other people's stereotypes, and consequently, social withdrawal is observed with negative emotions like worthlessness and shame [21,22]. Stereotypical thoughts, prejudices, negative feelings, and exclusionary attitudes toward the patients may be internalized by their family members as well [11,23].

Experiencing self-stigma can lead family members to have lower self-esteem, hopelessness, despair, depression, hiding the illness and social withdrawal, impairments in individual and social/familial functioning, increase their burden, and decrease therapeutic alliance [9,11,17,24]. Self-stigma of the family members generally manifests itself as devaluation, feelings of insufficiency, social withdrawal, and concealment of the disease [9,11,23,25]. Stigma experience in family members is found to be significantly correlated with depression, suicidal thoughts, and higher caregiver burden [26–28].

Studies conducted in Turkey revealed that family members of the patients experience self-stigma [27,29], and pointed out that self-stigma is significantly correlated with depression and caregiver burden [27]. Researchers in studies mentioned early used the self-stigma scales that were developed for the patients [30,31] by adapting them into relatives of the patients. In Turkey, there is no culturally sensitive scale evaluates the self-stigma of the relatives of the patients. The purpose of this study is to develop a scale to assess the self-stigma of family members of the patients and to evaluate its psychometric properties.

Methods

Participants

One hundred and six relatives (mother, father, sibling, the spouse who lives together with) of the patients who are diagnosed with schizophrenia or schizoaffective disorder according to DSM-5 criteria [32] and outpatients of Kocaeli University School of Medicine

Psychiatry Polyclinic between September 2016 and July 2017 were included to the study. Ethical approval for the study was taken from Kocaeli University Ethical Committee of Non-invasive Clinical Research (KÜ GOKAEK 2016/61). Family members of the patients were informed about the purpose and procedure of the study, and informed consent was taken from those who agreed to participate.

Inclusion criteria

Family members of the patients were taken to the study who agreed to participate, are 18–65 years old, do not have mental retardation, any current psychiatric disorder or neurological disease which may affect their judgment, and at least graduated from primary school.

Assessment

Sociodemographic form for families

The sociodemographic information form includes the relative's age, sex, marital status, education level, employment status, economic conditions, and relationship with the patient.

Self-Stigma Inventory for Families (SSI-F)

Self-stigma scales developed for the patients with mental illnesses [33,34], Internalized Stigma of Mental Illness Scale [30], and the scales developed for the family members or caregivers of the patients such as self-stigma scale [11], internalized stigma [23], and devaluation scale [9] were examined, and 25-item self-stigma scale for the relatives of the patients was formed. A focus group interview was conducted with 18 family members of the patients with schizophrenia, and the items of the scale were reevaluated. Then, a 19-item scale was formed that was comprised of self-stigma statements that the family members emphasized and brought up themselves. The answer to each item was arranged as 5-point Likert type scale as "1 = do not agree, 2 = slightly agree, 3 = moderately agree, 4 = generally agree, 5 = totally agree." A pilot study was conducted with 19-item inventory with 18 family members, and the scale was finalized by reexamining the incomprehensible items.

Zarit Caregiver Burden Scale (ZCBS)

Zarit Caregiver Burden Scale was developed by Zarit et al. [35] for assessing the burden of the caregivers of patients with Alzheimer's disease. In Turkey, Özlü et al. [36] conducted its reliability and validity study with relatives of the patients with schizophrenia. The Turkish version of the scale consisted of 19 items. Internal consistency of the scale was 0.83. Higher scores indicate greater burden.

Beck Depression Inventory (BDI)

The scale was developed by Beck et al. [37] to assess physical, emotional, and cognitive symptoms observed in depression and the study of its Turkish adaptation was conducted by Hisli [38]. It is a 21-item self-assessment scale. Cronbach's alpha coefficient was found as 0.90. Higher scores indicate the greater level of depression.

Beck Hopelessness Scale (BHS)

It is a 20-item scale developed by Beck, Lester, and Trexler [39], and adapted to Turkish culture by Durak [40]. Internal consistency of the scale was found as 0.86. Higher scores from the scale indicate the higher level of hopelessness.

Rosenberg Self-Esteem Scale (RSES)

In this study, 10-item Rosenberg Self-Esteem Scale [41] was used. Turkish reliability and validity study of the scale was conducted by Çuhadaroğlu [42]. Internal consistency of the scale was 0.71. Higher scores indicate higher self-esteem.

Statistical analysis

Statistical analyses were carried out with the SPSS 22 (IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.). For examination of structure validity, the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy and Bartlett's tests of sphericity were utilized to check preliminary assumptions of factor analysis. The factor analysis was done by using Principal Component Analysis and Direct Oblimin Rotation. Corrected item–total correlations, Cronbach's alpha, and Cronbach's alpha if item deleted were calculated to assess the internal consistency of the scale. Pearson or Spearman correlations depending on the distributional features of the variables were used for the assessment of concurrent validity and test–retest reliability. Level of significance was set at a *P*-value of 0.05.

Results

Sociodemographic characteristics of the participants were given in Table 1.

Table 1. Sociodemographic characteristics of the family members (*n* = 106).

Age (mean ± SD)	51.7 ± 13.2		
Education (mean ± SD)	9.1 ± 4.0		
Gender (<i>n</i> , %)	Female	56	52.8
Marital status (<i>n</i> , %)	Married	82	77.4
Relationship (<i>n</i> , %)	Mother	32	30.2
	Father	31	29.2
	Sibling	20	18.9
	Spouse	23	21.7

The validity of the SSI-F

Construct validity

Explanatory factor analysis was conducted to examine the construct validity. The KMO test indicated excellent sampling adequacy (KMO = 0.804), and Bartlett's test of sphericity has suggested that a factor analysis may be useful for the data ($\chi^2 = 883.19$, *df* = 91, *P* < 0.001). In the explanatory factor analysis of the 19-item scale, five factors were found which can explain 72.6% of the total variance and has eigenvalue greater than 1. The scree plot showed that the slope started to change and drop dramatically after the third factor. Thus factor analysis was repeated by Direct Oblimin with three factors and the items with factor value less than 0.45 (item numbers 1, 3, 11, 12, 19) were removed. Thereby, the scale had 3 factors and 14 items. It was revealed that first factor explains 44.6% of the total variance, the second factor explains 12.3% of the total variance, and the last factor explains 9.9% of the total variance, and together they explain 66.8% of the total variance. In terms of the items constitute the factors: first factor (9, 8, 16, 10, 7, 15) was labelled as social withdrawal, second factor (13, 14, 5) described as concealment of the illness, and third factor (2, 4, 18, 17, 6) entitled as perceived devaluation (Table 2).

Content validity

The correlation between the total score of the scale and its subscales was calculated to assess the content validity (Table 3). A high correlation was found between the SSI-F total score and social withdrawal (*r* = 0.86), concealment of the illness (*r* = 0.74), and perceived devaluation subscale (*r* = 0.90).

Concurrent validity

Concurrent validity of the SSI-F was assessed with its correlation with BDI, BHS, RSES, and ZCBS. The results were given in Table 4. SSI-F was significantly correlated with all the scales. The scale was positively correlated with BDI, BHS, and ZCBS, and negatively correlated with RSES as expected.

The reliability of the SSI-F

Internal consistency reliability

Item–total correlation and Cronbach's alpha if item deleted were analysed. In the internal consistency analysis, Cronbach's alpha coefficient of the scale was calculated as 0.88 for SSI-F final version and 19-item first version as well. Cronbach's alpha coefficient for the social withdrawal, concealment of the illness, and perceived devaluation factors were 0.84, 0.82 and 0.84 respectively. Data concerning the item–total correlations and Cronbach's alpha coefficients calculated for each item through an if item deleted technique can be found in Table 5. Item–total score correlation

Table 2. Factor analysis and factor loadings of the SSI-F.

No	Items	Factor 1 Social withdrawal	Factor 2 Concealment of the illness	Factor 3 Perceived devaluation
9	I think that people are afraid that I could lose my control since I am a relative of a patient with mental illness	0.840		
8	I stay away from people thinking that they would make comments or jokes that could hurt me because I am a relative of a patient with mental illness	0.813		
16	I think that other people don't care about me because I am a relative of a patient with mental illness	0.774		
10	I think that I am a burden to people around me since I am a relative of a patient with mental illness	0.719		
7	I think that I can't take proper decisions because I am a relative of a patient with mental illness	0.555		
15	I stay away from people around me thinking that they wouldn't understand me because I am a relative of a patient with mental illness	0.477		
13	I don't say the real name of my relative's illness to my friends and neighbours since I fear from being excluded		0.942	
14	I don't say the real name of my relative's illness to my other relatives since I fear from being excluded		0.894	
5	I don't tell my friends that my relative has a mental illness		0.722	
2	I have lower self-esteem ever since I obliged to live with a patient			0.860
4	I feel like I'm useless because I am a relative of a patient with mental illness			0.761
18	I think that I can't be a successful person because I'm a relative of a patient with mental illness			0.701
17	I think that I can't be happy because I'm a relative of a patient with mental illness			0.604
6	I can't take responsibilities like other people because I am a relative of a patient with mental illness			0.579
	Eigenvalues	6.241	1.731	1.389
	Variance explained, %	44.58	12.36	9.92
	Total variance explained, %	66.8		

Table 3. Correlations between SSI-F total score and factor scores.

	SSI-F total	Social withdrawal	Concealment of the illness	Perceived devaluation
SSI-F total	1.000			
Social withdrawal	0.858*	1.000		
Concealment of the illness	0.739*	0.427*	1.000	
Perceived devaluation	0.898*	0.637*	0.609*	1.000

* $P < 0.001$.**Table 4.** Correlation coefficients of Self-Stigma Inventory for Family Members (SSI-F) with Beck Depression Inventory (BDI), Beck Hopelessness Scale (BHS), Rosenberg Self-Esteem Scale (RSES) and Zarit Caregiver Burden Scale (ZCBS).

SSI-F	BDI	BHS	RSES	ZCBS
Total score	0.479**	0.273**	-0.351*	0.539**
Social withdrawal	0.482**	0.322**	-0.293**	0.515**
Concealment of the illness	0.235*	0.043	-0.124	0.332**
Perceived devaluation	0.417**	0.232*	-0.392**	0.445**

* $P < 0.05$, ** $P < 0.01$.

coefficients were between 0.49 and 0.75, and all were statistically significant ($P < 0.001$).

Test-retest reliability

In the test-retest reliability analysis, the data related to 30 individuals were analysed through the Spearman correlation test in a 1-month interval. The test-retest reliability coefficient of the scale was 0.93 ($P < 0.001$).

Discussion

In the current study, the validity and reliability of the newly developed scale (SSI-F) which was prepared to

evaluate the self-stigma experience of family members of the patients with schizophrenia were examined. The fact that this scale was formed by reconsidering existing studies in the related field and working with the family members themselves enabled the scale to be a culturally sensitive, easy to comprehend, and time-saving instrument. Regarding psychometric properties, it was found to be reliable and valid 14-item scale with its three-factor structure. Items in the first factor were regarded as social withdrawal since it includes the evaluations of the people around the family members. These items reflect that the family members have thoughts about people were being afraid of them as if they can lose their control anytime, stay away from people in case they may make comments or jokes that would presumably hurt them, think that others do not care them, have thoughts about being a burden to others, believe that others are assuming that family members cannot take proper decisions, and stay away from others because of thinking they cannot be understood. The items in the second factor were entirely about the concealment of the illness. It showed that family members were unwilling to talk about the illness of their patients with their close circles, neighbours, or friends. In the third factor, lower self-confidence, thoughts on failing,

Table 5. Item and reliability analyses results of the SSI-F.

	Items	Corrected item-total correlation	Alpha if item deleted
1	I feel as if I am carrying a label on me "s/he's a relative of a mentally ill person"	0.403	0.882
2	I have lower self-esteem ever since I obliged to live with a patient	0.492	0.879
3	I think that other people stay away from me since I am a relative of a patient with mental illness	0.422	0.882
4	I feel like I'm useless because I am a relative of a patient with mental illness	0.548	0.879
5	I don't tell my friends that my relative has a mental illness	0.457	0.884
6	I can't take responsibilities like other people because I am a relative of a patient with mental illness	0.601	0.875
7	I think that I can't take proper decisions because I am a relative of a patient with mental illness	0.703	0.871
8	I stay away from people thinking that they would make comments or jokes that could hurt me because I am a relative of a patient with mental illness	0.487	0.879
9	I think that people are afraid that I could lose control since I am a relative of a patient with mental illness	0.667	0.877
10	I think that I am a burden to people around me since I am a relative of a patient with mental illness	0.668	0.876
11	I feel like I'm dependent on health system (doctors, hospitals, pharmacy) since my relative has to be on medication all the time	0.441	0.883
12	I think that other people would be afraid of me when they hear that my relative is receiving a psychiatric treatment	0.401	0.882
13	I don't say the real name of my relative's illness to my friends and neighbours since I fear from being excluded	0.512	0.879
14	I don't say the real name of my relative's illness to my other relatives since I fear from being excluded	0.492	0.879
15	I stay away from people around me thinking that they wouldn't understand me because I am a relative of a patient with mental illness	0.520	0.878
16	I think that other people don't care about me because I am a relative of a patient with mental illness	0.623	0.876
17	I think that I can't be happy because I'm a relative of a patient with mental illness	0.705	0.872
18	I think that I can't be a successful person because I'm a relative of a patient with mental illness	0.753	0.872
19	I think that nobody would marry me since I am a relative of a patient with mental illness	0.127	0.888
	Cronbach's α in Total		0.884

senses of uselessness, thoughts on feeling unable to be happy, and thoughts about their inability to fulfil their responsibilities were considered as the perceived devaluation of the family members. Social withdrawal, concealment of the illness, and perceived devaluation are the dimensions that are generally revealed in self-stigma scales [9,11,23]. Endorsement of stereotypes factor that was found in other scales was placed in both first and third factors in SSI-F. For example, the stereotypical judgments such as "patients cannot take proper decisions," "they are useless," "they cannot fulfil their responsibilities as other people do," "they may show unpredictable behaviours," "they are unimportant beings," and "they cannot be happy or successful" were being internalized by the relatives of the patients in their self-stigmatized thought processes.

This scale, which was formed through the interviews conducted with family members of the patients, was found to reveal the self-stigmatization dimensions conceptually which were experienced by the relatives. Self-stigma feeling comprised of perceived devaluation, concealment of the illness, and thoughts and behaviours of social withdrawal. The correlations between those three factors were found to be significantly high. However, the fact that there was a moderate correlation between social withdrawal and concealment of the illness needs some explanation. We think that this situation might be a reflection of culture-specific properties. The family members hiding the name and diagnosis of their patients' illness from their relatives, friends, or neighbours do not necessarily indicate

their withdrawal from the society. Studies conducted in Turkey [43,44] showed that people in society fear from the patient with psychotic illness and the patients are generally perceived negatively. This perception may have an influence on the family members of the patients for their concealment of the illness.

The SSI-F total score was significantly correlated with the BDI, BHS, RSES, and ZCBS. Similar results were shown in other studies investigating the self-stigma of the relatives of the patients with mental illnesses. Most of the studies presented a significant correlation between self-stigma and low self-esteem [20,31], hopelessness and depression [26–28,31], and higher caregiver burden [20,26,27]. In our study, especially the relation between self-stigma and family burden ($r = 0.54$) was explicit. Mak and Cheung [11] similarly found a relationship between self-stigma and caregiver burden, and they underlined that the family members tend to socially withdraw and conceal the illness because of the feelings of shame and insufficiency arising from living with their mentally ill relatives. Some studies also indicated that self-stigma has a mediator role on caregiver burden [24,25].

In Turkey, studies conducted with the family members of the patients revealed that the relatives also have stereotypical and stigmatized emotions, thoughts, and behaviours [29,43,44]. Since the relatives of the patients both stigmatize the patients, being stigmatized, and experience the self-stigma, these experiences might be a significant predicament that increases their distress and burden. It is obvious that throughout the therapy

process of the patients, interventions and educations given to the relatives of the patients should take into consideration their feelings about self-stigmatization. We believe that this scale which is developed to evaluate the feelings of self-stigmatization is an important tool for research purposes and therapeutic processes.

Limitations of the study

This study has some limitations that should be considered. First, the study had been carried out in a single centre using a convenience sampling, whose patients are under treatment; thus the results may not be representative of all relatives of the patients some of whom may not currently be under treatment. Second, the study has a relatively small sample size that might have affected the statistical power. Third, we did not have the opportunity to compare this scale with another reliable and valid scale which directly assesses the self-stigma of the relatives, which unfortunately is not available in Turkish. Convergent validity analysis remained limited to other equivalent scales with which reliability and validity studies were conducted in Turkey. Fourth, the measurements used in this study were self-report scales that might not reflect the real feelings of the relatives. Notwithstanding these limitations, the present study is the first attempt to develop a tool that captures the cultural foundations of the concept of self-stigmatization of the people who have a relative with schizophrenia living in Turkey. Although more research is needed to replicate and further validate the measure, the findings of this study provided preliminary support of its validity. Future studies should also be done to validate in the relatives of other severe illnesses, such as dementia, alcohol and substance use disorder, and AIDS, who have been experiencing a tremendous amount of burden and suffering.



Acknowledgments

We would like to thank all participants who took part in the study.

Disclosure statement

No potential conflict of interest was reported by the authors.

ORCID

Fatma Betül Abut  <http://orcid.org/0000-0001-6923-3150>
Kübra İpçi  <http://orcid.org/0000-0003-2854-6286>

References

- [1] Goffman E. Stigma: notes on the management of spoiled identity. Englewood Cliffs (NJ): Prentice-Hall; 1963.
- [2] Corrigan PW, Penn DL. Lessons from social psychology on discrediting psychiatric stigma. *Am Psychol*. 1999;54(9):765–776.
- [3] Angermeyer MC, Dietrich S. Public beliefs and attitudes towards people with mental illness: a review of population studies. *Acta Psychiatr Scand*. 2006;113(3):163–179.
- [4] Jorm AF, Oh E. Desire for social distance from people with mental disorders: a review. *Aust N Z J Psychiatry*. 2009;43(3):183–200.
- [5] Corrigan PW. The impact of stigma on severe mental illness. *Cogn Behav Pract*. 1998;5(2):201–222.
- [6] Link BG, Phelan JC. Conceptualizing stigma. *Annu Rev Sociol*. 2001;27:363–385.
- [7] Alexander L, Link B. The impact of contact on stigmatizing attitudes toward people with mental illness. *J Ment Health*. 2003;12(3):271–289.
- [8] Phelan JC, Bromet EJ, Link BG. Psychiatric illness and family stigma. *Schizophr Bull*. 1998;24(1):115–126.
- [9] Struening EL, Perlick DA, Link BG, et al. Stigma as a barrier to recovery: the extent to which caregivers believe most people devalue consumers and their families. *Psychiatr Serv*. 2001;52(12):1633–1638.
- [10] Schulze B, Angermeyer MC. Subjective experienced of stigma. A focus group study of schizophrenic patients, their relatives and mental health professionals. *Soc Sci Med*. 2003;56(2):299–312.
- [11] Mak WW, Cheung RY. Affiliate stigma among caregivers of people with intellectual disability or mental illness. *J Appl Res Intellect Disabil*. 2008;21(6):532–545.
- [12] Phillips MR, Li Y, Stroup TS, et al. Causes of schizophrenia reported by patients' family members in China. *Br J Psychiatry*. 2000;177(1):20–25.
- [13] Magliona L, Guarneri M, Fiorillo A, et al. A multicenter Italian study of patients' relatives' beliefs about schizophrenia. *Psychiatr Serv*. 2001;52(11):1528–1530.
- [14] Yildiz M, Yazici A, Cetinkaya O, et al. Relatives' knowledge and opinions about schizophrenia. *Turk Psikiyatr Derg*. 2010;21(2):105–113.
- [15] Angermeyer MC, Schulze B, Dietrich S. Courtesy stigma: a focus group study of relatives of schizophrenia patients. *Soc Psychiatry Psychiatr Epidemiol*. 2003;38(10):593–602.
- [16] Chang KH, Horrocks S. Lived experiences of family caregivers of mentally ill relatives. *J Adv Nurs*. 2006;53(4):435–443.
- [17] González-Torres MA, Oraa R, Aristegui M, et al. Stigma and discrimination towards people with schizophrenia and their family members. A qualitative study with focus groups. *Soc Psychiatry Psychiatr Epidemiol*. 2007;42(1):14–23.
- [18] Krupchanka D, Kruk N, Murray J, et al. Experience of stigma in private life of relatives of people diagnosed with schizophrenia in the Republic of Belarus. *Soc Psychiatry Psychiatr Epidemiol*. 2016;51(5):757–765.
- [19] Lerner D, Chang H, Rogers WH, et al. Psychological distress among caregivers of individuals with a diagnosis of schizophrenia or schizoaffective disorder. *Psychiatr Serv*. 2018;69(2):169–178.
- [20] Chang CC, Yen CF, Jang FL, et al. Comparing affiliate stigma between family caregivers of people with different severe mental illness in Taiwan. *J Nerv Ment Dis*. 2017;205(7):542–549.
- [21] Corrigan PW, Watson AC. The paradox of self-stigma and mental illness. *Clin Psychol*. 2002;9(1):35–53.

- [22] Corrigan PW, Larson JE, Rusch N. Self-stigma and the “why try” effect: impact on life goals and evidence-based practices. *World Psychiatry*. 2009;8(2):75–81.
- [23] Zisman-Ilani Y, Levy-Frank I, Hasson-Ohayon I, et al. Measuring the internalized stigma of parents of persons with a serious mental illness: the factor structure of the parents’ internalized stigma of mental illness scale. *J Nerv Ment Dis*. 2013;201(3):183–187.
- [24] Hasson-Ohayon I, Levy I, Kravetz S, et al. Insight into mental illness, self-stigma, and the family burden of parents of persons with a severe mental illness. *Compr Psychiatry*. 2011;52(1):75–80.
- [25] Sideli L, Mulè A, La Cascial C, et al. Validation of the Italian version of the devaluation consumers’ scale and the devaluation consumers families scale. *J Psychopathol*. 2016;22(4):251–257.
- [26] Magaña SM, García JIR, Hernández MG, et al. Psychological distress among latino family caregivers of adults with schizophrenia: the roles of burden and stigma. *Psiquiatr Serv*. 2007;58(3):378–384.
- [27] Gumus F, Dikec G, Ergun G. Relations among internalized stigmatization, depressive symptom frequency and family loading in first-degree caregivers of the patients treated in the psychiatry clinic of a state hospital. *Arch Psychiatr Nurs*. 2017;31(5):522–527.
- [28] Ostman M, Kjellin L. Stigma by association. *Br J Psychiatry*. 2002;181(6):494–498.
- [29] Yıldız M, Ozten E, Isik S, et al. Şizofreni hastaları, hasta yakınları ve majör depresif bozukluk hastalarında kendini damgalama [self-stigmatization among patients with schizophrenia, their relatives and patients with major depressive disorder]. *Anadolu Psikiyatri Derg*. 2012;13(1):1–7. Turkish.
- [30] Ritsher JB, Otilingama PG, Grajales M. Internalized stigma of mental illness: psychometric properties of a new measure. *Psychiatry Res*. 2003;121(1):31–49.
- [31] Corrigan PW, Watson AC, Barr L. The self-stigma of mental illness: implications for self-esteem and self-efficacy. *J Soc Clin Psychol*. 2006;25(8):875–884.
- [32] American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed Washington (DC): American Psychiatric Association; 2013.
- [33] Corrigan PW, Michaels PJ, Vega E, et al. Self-Stigma of mental illness scale-short form: reliability and validity. *Psychiatry Res*. 2012;99(1):65–69.
- [34] Ochoa S, Martínez-Zambrano F, Garcia-Franco M, et al. Development and validation of the Self-Stigma Questionnaire (SSQ) for people with schizophrenia and its relation to social functioning. *Compr Psychiatry*. 2015;62:93–99.
- [35] Zarit SH, Zarit JM. The memory and behavior problems checklist and the burden interview. University Park (PA): Pennsylvania State University Gerontology Center; 1990.
- [36] Özlü A, Yıldız M, Aker T. Zarit Bakıcı Yük Ölçeği’nin şizofreni hasta yakınlarında geçerlilik ve güvenilirlik çalışması [A reliability and validity study on the Zarit caregiver burden scale]. *Arch Neuropsychiatry*. 2009;46(Spec No):38–42. Turkish.
- [37] Beck AT. An inventory for measuring depression. *Arch Gen Psychiatry*. 1961;4:561–571.
- [38] Beck HN. Depresyon Envanteri’nin üniversite öğrencileri için geçerliği, güvenilirliği [Reliability and validity of Beck depression inventory for university students]. *Psikoloji Dergisi*. 1989;7:3–13. Turkish.
- [39] Beck AT, Weissman A, Lester D, et al. The measurement of pessimism. The Hopelessness Scale. *J Consult Clin Psychol*. 1971;12(6):861–865.
- [40] Durak A, Palabıyıkoglu R. Beck Umutsuzluk Ölçeği geçerlilik çalışması [Validity study of Beck hopelessness scale]. *Kriz Dergisi*. 1994;2:311–319.
- [41] Rosenberg M. Society and the adolescent self-image. Princeton (NJ): Princeton University Press; 1965.
- [42] Çuhadaroglu F. Adolesanlarda benlik saygısı [Self-esteem in adolescents]. Unpublished MD thesis. Ankara (Turkey): Hacettepe University Medical Faculty Department of Psychiatry; 1986. Turkish.
- [43] Özbaş D, Küçük L, Buzlu S. Ruhsal bozukluğu olan bireye sahip ailelerin hastalığa karşı tutumları [attitudes of families towards mental disorders who have family members with mental disorders]. *Dusunen Adam*. 2008;21(1–4):14–23. Turkish.
- [44] Sağduyu A, Aker T, Özmen E, et al. Şizofrenisi olan hastaların yakınlarının şizofreniye yönelik tutumları [relatives’ beliefs and attitudes towards schizophrenia: an epidemiological investigation]. *Turk Psikiyatri Derg*. 2003;14(3):203–212.

Appendices

APPENDIX 1. Self-Stigma Inventory for Family Members (SSI-F) in Turkish

AİLELER İÇİN KENDİNİ DAMGALAMA ÖLÇEĞİ (KDÖ-A)

Adı soyadı:

Tarih: / /

Aşağıda ruhsal hastalığı olan kişilerin yakınlarının genellikle yaşadığı sıkıntılar listelenmiştir. Yaşadığınız sıkıntıların şiddetini anlayabilmemiz için her maddede kendinize en uygun seçeneği işaretleyiniz.		Bana hiç uymaz	Biraz uyar	Orta derecede uyar	Genellikle uyar	Tam uyar
1	Hasta yakını olduğum için insanların kontrolümü kaybetmemden korktuğumu düşünüyorum.					
2	Hasta yakını olduğum için incitici yorum ya da şaka yaparlar diye insanlardan uzak duruyorum.					
3	Hasta yakını olduğum için çevremdeki insanların beni önemsemediklerini düşünüyorum.					
4	Hasta yakını olduğum için çevreme yük olduğumu düşünüyorum.					
5	Hasta yakını olduğum için uygun kararlar alamayacağımı düşünüyorum.					
6	Yakınımın hastalığından dolayı beni anlamayacaklarını düşündüğüm için çevremdeki insanlardan uzak duruyorum.					
7	Dışlanmaktan korktuğum için yakınımın hastalığının gerçek adını komşu ve arkadaşlarıma söylemiyorum.					
8	Dışlanmaktan korktuğum için yakınımın hastalığının gerçek adını akrabalarıma söylemiyorum.					
9	Arkadaşlarıma yakınımın ruhsal bir hastalığı olduğunu söylemiyorum.					
10	Hasta biriyle yaşamak zorunda kaldığım için özgüvenim azaldı.					
11	Hasta yakını olduğum için kendimi işe yaramaz hissediyorum.					
12	Hasta yakını olduğum için başarılı olamayacağımı düşünüyorum.					
13	Hasta yakını olduğum için mutlu olamayacağımı düşünüyorum.					
14	Hasta yakını olduğum için sorumluluklarımı diğer insanlar gibi yerine getiremiyorum.					

Appendix 2. Self-Stigma Inventory for Family Members (SSI-F) in English

SELF-STIGMA INVENTORY FOR FAMILY MEMBERS (SSI-F)

Name:

Date: / /

The most common problems experienced by relatives of the people with mental illnesses are listed below. Please put a mark on the option that suits you best in each item so that we can assess the severity of your problems.		Do not agree	Slightly agree	Moderately agree	Generally agree	Totally agree
1	I think that people are afraid that I could lose my control since I am a relative of a patient with mental illness.					
2	I stay away from people thinking that they would make comments or jokes that could hurt me because I am a relative of a patient with mental illness.					
3	I think that other people don't care about me because I am a relative of a patient with mental illness.					
4	I think that I am a burden to people around me since I am a relative of a patient with mental illness.					
5	I think that I can't take proper decisions because I am a relative of a patient with mental illness.					
6	I stay away from people around me thinking that they wouldn't understand me because I am a relative of a patient with mental illness.					
7	I don't say the real name of my relative's illness to my friends and neighbors since I fear from being excluded.					
8	I don't say the real name of my relative's illness to my other relatives since I fear from being excluded.					
9	I don't tell my friends that my relative has a mental illness.					
10	I have lower self-esteem ever since I obliged to live with a patient.					
11	I feel like I'm useless because I am a relative of a patient with mental illness.					
12	I think that I can't be a successful person because I'm a relative of a patient with mental illness.					
13	I think that I can't be happy because I'm a relative of a patient with mental illness.					
14	I can't take responsibilities like other people because I am a relative of a patient with mental illness.					