



## Original Article

# Determination of internalized stigma and social functioning level in schizophrenia patients

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### Abstract

**Objectives:** This definitive-relational type of study determined the level of internalized stigma and social functioning and the factors that affect the level of internalized stigma in patients with a diagnosis of schizophrenia.

**Methods:** The sample population included 113 patients with a diagnosis of schizophrenic patients. A personal knowledge form, the Social Life Evaluation Questionnaire (SLEQ, independence-performance subscale of the Social Functioning Survey (SFS), the, and the Internalized Stigma of Mental Illness (ISMI) scale were used to collect data. The data were collected between December 2015 and February 2016 in polyclinics and a center of community mental health of a hospital using the face-to-face technique. The data were summarized using number, percentage, average, and standard deviation. Because a normal distribution was determined, the independent t-test was used for pair-wise comparisons. For evaluating relationships among continuous variables, correlation analysis was used.

**Results:** In this study, education level and smoking status affected internalized stigma status. If patients met with their friends, relatives, or partner frequently or joined in social activities, the level of internalized stigma decreased. There was a weak and negative correlation between the independence-performance subscale of social functioning and total points, alienation, stereotype endorsement, social withdrawal, and stigma resistance subscales of internalized stigma in mental disorders.

**Conclusion:** Patients with schizophrenia have a medium level of internalized stigma. There is a relationship between the internalized stigma level with some sociodemographic features and social functioning situations. Psychiatry nurses should attempt to increase patient function in cooperation with institutions and the patient's family.

**Keywords:** Internalized stigma; nurse, schizophrenia; social functioning.

Schizophrenia is a neurodevelopmental disorder that contains not only psychotic symptoms but also many dysfunctions.<sup>[1]</sup> There are false beliefs about mental illnesses, including schizophrenia, across the world<sup>[2]</sup> and because of these false beliefs, patients are stigmatized and excluded from society.<sup>[3]</sup> Patients diagnosed with schizophrenia are most exposed to stigmatization among patients with mental illnesses.<sup>[4]</sup> Factors such as lack of education and not being informed about the disease, impact of the media, and exclusion of those who cannot keep up with modern life contribute to the stigmatization of these patients.<sup>[5]</sup> Studies report that schizophrenia is not sufficiently understood, and prejudices related to it play a role

in stigmatizing these patients.<sup>[6]</sup> In the face of this situation, disorders such as embarrassment, feelings of inadequacy, automatic negative thoughts, avoidance of social relationships, and decreased self-esteem can be seen in patients with a diagnosis of schizophrenia.<sup>[7]</sup>

Embarrassment, self-blaming, hopelessness, and fear of discrimination caused by the stigmatization of individuals with mental disorders reveal the perception of stigmatization in patients.<sup>[3]</sup> Individuals' internalization of the prejudices from society, developing discrimination against themselves, and isolation from society with negative emotions such as devaluation and shame are defined as "internalized stigma".<sup>[8]</sup> The

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**What is known on this subject?**

- Patients with schizophrenia experience stigmatization in the community. Over time, this feeling is accepted by the patient and causes internalized stigma. Along with the internalization of stigmatization, patients can live an isolated life by withdrawing themselves from society.

**What is the contribution of this paper?**

- This study found that patients experienced moderate levels of internalized stigma, their social functioning was poor, and social functioning decreased as internalized stigma increased.

**What is its contribution to the practice?**

- The relationship between internalized stigma and the social functioning of the patients revealed the importance of the perception of stigmatization, which causes an isolated life by keeping patients away from interpersonal relationships. Based on the results, psychiatric nurses can contribute to the prevention of stigmatization of patients with a diagnosis of schizophrenia and increase their social functioning by working in cooperation with family, society, institutions, and organizations.

person who thinks that patients like him/her are considered worthless and are not accepted by society feels afraid of this situation. As a coping method, the individual displays the behavior of keeping away from people and avoiding socialization in society.<sup>[9]</sup> Internalization of stigma causes loneliness, decreased social support, and lowered self-esteem<sup>[10]</sup> and it can be an obstacle in the treatment process of diseases.<sup>[11,12]</sup>

The community tends to not only stigmatize the patient with a diagnosis of schizophrenia but also cuts off communication with the patient within social relationships. Patients try to hide their mental illnesses over the fear of being stigmatized, causing them to move away from social environments.<sup>[7]</sup> In addition to the pharmacological treatment administered to eliminate the symptoms of the disease, the functional levels of patients should be maintained in the treatment process.<sup>[13]</sup> Today, great emphasis is placed on mental social therapy approaches to achieve this goal.<sup>[14]</sup> A study found a significant improvement in the social functioning of patients with a diagnosis of schizophrenia through a psychosocial skill development program.<sup>[15]</sup> It is reported that through training programs, patients can see that other people have the same problems; they can begin to trust others in the group and share with them, increasing their social functioning. Schizophrenia can be detected at early stages through nursing interventions used for the early diagnosis and treatment of the disease. Therefore, the patient and his/her family's concern about stigmatization can be overcome, and the treatment process can be shortened.

This study determined the level of internalized stigma and social functioning in patients with a diagnosis of schizophrenia who received outpatient treatment. Among the important duties of a psychiatric nurse, a healthcare professional, are determining the problems that patients may encounter due to their illnesses, taking necessary precautions, and improving rehabilitation services. With their education and counseling role, psychiatric nurses also direct patients with a psychiatric disorder and their families to available support and community resources. Accordingly, patients' isolation from society can be prevented and the perception of stigmatization can be reduced.

**Research Questions**

1. What are the internalized stigma and social functioning levels of patients with a diagnosis of schizophrenia?
2. Do the internalized stigma levels differ in schizophrenic patients according to their characteristics and social functioning?
3. Is there a relationship between the social functioning scale's (SFS) independence-performance subscale and internalized stigma level in patients with a diagnosis of schizophrenia?

**Materials and Method**

The sample of the study consisted of 113 patients with a diagnosis of schizophrenia receiving outpatient treatment at a public hospital and Community Mental Health Center (CMHC) in Konya. In determining the sample number, 90% power, 0.05 significance value, and 0.20 expected effect were accepted. The numbers of independent variables and the comparison categories were 11 and 2, respectively, and the sample size was determined as 113.<sup>[16]</sup> The random sampling method was used for sample selection. Data were collected from December 2015 to February 2016 in a room reserved for the research through face-to-face interviews. Diagnoses of patients visiting the outpatient clinics were obtained from daily examination records. To ensure patients could participate in the research, physicians' guidance was used. The diagnoses of patients in the CMHC were evaluated by reviewing the patient files. Inclusion criteria for the study were having been diagnosed with schizophrenia, being able to answer the questions, and agreeing to participate in the study.

**Data Collection Tools**

*Personal Information Form:* The personal information form used in the study consisted of 11 questions about the introductory features and sociodemographic characteristics of patients such as age, gender, marital status, educational status, employment status, current place of residence, perceived income level, smoking, duration of disease, hospitalization status in the past year, and history of other psychiatric diseases in the family.

*Social Life Evaluation Questionnaire (SLEQ):* The SLEQ consists of three dimensions: social activities, social relations, and job-occupation. The social activities dimension includes 15 questions and determines the level of functioning by evaluating the individual's behaviors in daily life using a 5-point Likert type scale where the responses are "never," "rarely," "sometimes," "often," and "always." The social relations dimension consists of five questions that evaluate the individual's time spent with their friends, relatives, and partner as well as daily sleep time and time spent alone. The job/occupation dimension includes two questions that evaluate an individual's ability to work in a job and feeling ready to work. The researcher prepared the questions in the questionnaire in line with the literature.<sup>[17,18]</sup>

**Social Functioning Scale (SFS):** The SFS consists of seven sub-dimensions, one of which is independence-performance. Birchwood et al.<sup>[19]</sup> (1990) developed the scale and Yaprak Erakay (2001)<sup>[17]</sup> performed the Turkish validity and reliability study of the scale.<sup>[20]</sup> In the reliability analysis of the scale, Cronbach's alpha internal consistency coefficient was 0.807 and the reliability coefficient between the evaluations was 0.95 between the patient and the relative of the patient. Considering the compatibility of the items in the scale's sub-dimensions with Turkish culture, only the independence-performance sub-dimension was used. The independence-performance sub-dimension consists of 13 questions and responses to the items are given according to a 4-point Likert-type scale including "never," "rarely," "sometimes," and "often." Scores can range from 0 to 39 and higher scores indicate higher functioning.

**The Internalized Stigma of Mental Illness Scale (ISMI):** Ritsher et al.<sup>[21]</sup> (2003) developed the ISMI. Ersoy and Varan<sup>[22]</sup> (2007) performed the Turkish validity and reliability study of the scale. It is a 29-item self-report scale used to evaluate internalized stigma levels in mental illnesses. The scale includes five subscales: Alienation, Stereotype Endorsement, Discrimination, Social Withdrawal, and Stigma Resistance. In the Turkish validity and reliability study, the Cronbach's alpha coefficient was 0.93 for the whole scale, 0.84 for alienation, 0.71 for stereotype endorsement, 0.87 for discrimination, 0.85 for social withdrawal, and 0.63 for stigma resistance. Responses to the items in the ISMI are given according to a 4-point Likert-type scale, including "strongly disagree" (1 point), "disagree" (2 points), "strongly agree" (3 points), and "strongly disagree" (4 points). All items within the stigma resistance subscale are reverse scored. The mean scores obtained from the scale and subscales range from 1 to 4. On the scale, 2 points and lower indicate low, 2 to 2.49 points indicate mild, 2.5 to 3 points indicate medium, and 3 points and more indicate severe internalized stigma.<sup>[23]</sup>

### Data Analysis

Data were analyzed using number, percentage, mean, and standard deviation. The data were normally distributed, so the t-test, a parametric test, was used in independent groups. The relationship between continuous variables was analyzed using Pearson's correlation coefficient. Significance was evaluated at the level of  $p < 0.05$ .

### Ethical Considerations

Prior to conducting the research, Ethics Committee approval was obtained from the Head of the Non-Interventional Research Ethics Committee of the Selçuk University Faculty of Health Sciences. Institutional permission was obtained from the Public Hospitals Association and participating patients' written consent was obtained.

### Limitations of the Study

There were limitations arising from the measurement meth-

od used in the study. The lack of a data collection tool that evaluates social functioning and fits Turkish culture was a limitation of the study. Scales developed to determine the social functioning of patients and whose Turkish validity and reliability study was conducted did not fully reflect the cultural characteristics of Turkish society. Therefore, a questionnaire (SLEQ) created by the researcher in line with the literature and the "independence-performance" subscale of the SFS, whose Turkish validity and reliability study was performed by Yaprak Erakay (2001),<sup>[17]</sup> were used. Expert opinion was used for the evaluation of the questionnaire and the subscale.

### Results

Of the participating patients, 61.9% were male, 55.8% were 36 years of age and older, 71.7% were single, 38.9% completed primary school or were unschooled literate, and 93.8% were unemployed. Of the patients, 77.9% lived in a city, 62.8% perceived their income status as middle, 57.5% smoked, 54.9% had been hospitalized at least once in the past year, and 61% did not have a history of psychiatric disorders in their family. The average disease duration was  $13.8 \pm 11.6$  years.

The ISMI subscales of the participants were as follows: alienation  $2.59 \pm 0.73$ , stereotype endorsement  $2.44 \pm 0.51$ , discrimination  $2.59 \pm 0.72$ , social withdrawal  $2.82 \pm 0.67$ , and stigma resistance  $2.43 \pm 0.62$ . The mean total ISMI score was  $2.56 \pm 0.48$  (Table 1).

On examining the distribution of ISMI and its subscale scores according to the sociodemographic characteristics of the patients, there was a significant difference between the alienation subscale and the smoking variable. The mean score of the patients who smoked was higher than those who did not ( $p < 0.05$ ). A significant difference was found between the stigma resistance subscale and the educational status variable. Those who were unschooled literate or primary school graduates had a higher mean score compared to those who received secondary education or higher ( $p < 0.05$ ). There was no difference between the mean total ISMI score and its subscale scores and patients' sociodemographic characteristics of gender, age, marital status, employment status, place of living, perceived income status, state of hospitalization in the last year, and history of psychiatric diseases in the family ( $p > 0.05$ , Table 2).

Considering the relationship between the state of social life and ISMI, those who spent more time with their friends and partner/special people experienced less alienation. Those who spent more time with their friends and partner/special people and those who had frequent social activities had lower endorsed stereotypes. People who met their friends less experienced more discrimination and those who met their friends and relatives less withdrew from social areas more. As the frequency of time spent with friends, relatives, and partner/special people increased, less stigma resistance occurred. The study also found that patients who did not spend much time with their friends, relatives, and partner/special

**Table 1. Distribution of patients' mean Internalized Stigma of Mental Illness (ISMI) Scores**

ISMI Subscale and total scores	Minimum and maximum scores that can be achieved	Minimum and maximum scores achieved	Mean±SD
1. Alienation	1–4	1.00–4.00	2.59±0.73
2. Stereotype endorsement	1–4	1.00–3.57	2.44±0.51
3. Discrimination	1–4	1.00–4.00	2.59±0.72
4. Social withdrawal	1–4	1.00–4.00	2.82±0.67
5. Stigma resistance	1–4	1.00–4.00	2.43±0.62
6. Total score	1–4	1.41–3.76	2.56±0.48

SD: Standard deviation.

people and who had a low frequency of social activity experienced more internalized stigma ( $p<0.05$ , Table 3).

While there was no correlation between the SFS independence-performance subscale and discrimination, there was a weak and negative relationship with alienation, stereotype endorsement, social withdrawal, stigma resistance, and total score ( $p<0.05$ , Table 4).

## Discussion

In the study, internalized stigma levels of the patients were determined using the ISMI. The patients experienced medium level internalized stigma in their total ISMI score and alienation, discrimination, and social withdrawal subscales and they experienced mild internalized stigma in the stereotype endorsement and stigma resistance subscales. Mosanya et al.<sup>[24]</sup> (2014) reported that patients experienced mild level stigma in alienation and social withdrawal subscales, minimum level stigma in total ISMI score, stereotype endorsement, and discrimination, and moderate level stigma in stigma resistance. Another study conducted with patients with a diagnosis of schizophrenia found that they experienced moderate level internalized stigma in all dimensions.<sup>[25]</sup> A study by Brohan et al.<sup>[26]</sup> (2011) conducted with patients diagnosed with bipolar affective disorder and depression found that the patients had mild stigma in the alienation subscale, minimum stigmatization in the total score, stereotype endorsement, discrimination, and social withdrawal subscales, and medium stigmatization in the stigma resistance subscale. This study found patients' internalized stigma scores were higher. This could have resulted from the fact that more than half of the participating patients (52.2%) completed primary school or were unschooled literate. In this study, the patients had the highest score on the social withdrawal subscale of the ISMI and the lowest score on the stereotype endorsement and stigma resistance subscales. A study conducted with patients with a diagnosis of schizophrenia reported that the patients received the highest score on the stereotype endorsement and the lowest score on the stigma resistance subscale.<sup>[25]</sup> Another study conducted in Nigeria to determine the perception of stigmatization of patients with a diagnosis of schizophrenia found that patients received the

lowest score on the stereotype endorsement and the highest score on stigma resistance.<sup>[24]</sup> The current study found different findings, especially in the stereotype endorsement and stigma resistance subscales, which could have resulted from cultural differences.

The sociodemographic characteristics of the participating patients and their scores from the ISMI were compared to determine the factors that affect internalized stigma levels. The mean stigma resistance scores of those who completed primary school or were unschooled literate were higher than secondary school graduates or over ( $p<0.05$ ). Sarıkoç (2011) carried out a study with outpatients with a diagnosis of psychiatric diseases and found educational status correlated with the total score of ISMI and the subscales alienation, stereotype endorsement, discrimination, and social withdrawal. In addition, the mean scores of illiterate patients were higher compared to primary school graduates.<sup>[27]</sup> A study with patients in psychiatry clinics by Korkmaz (2013) reported a relationship between the patients' education level and internalized stigma, and those who completed primary school or were unschooled literate had higher internalized stigma scores than people having a university or higher education.<sup>[7]</sup> Another study carried out with outpatients diagnosed with psychiatric diseases reported that ISMI total score and alienation, stereotype endorsement, and social withdrawal subscale scores of those who were illiterate were higher.<sup>[28]</sup> According to the results of the study, as expected, as the education level increased, patients were more tolerant toward one another and there was a decrease in stigmatization levels.

The current study found a significant relationship between smoking and the alienation subscale ( $p<0.05$ ). No study investigating the relationship between smoking and stigmatization has been found in the relevant literature. However, studies have shown that patients with schizophrenia start smoking at an early age<sup>[29]</sup> and that smoking decreases the attention levels<sup>[30]</sup> of patients. The emergence of the disease at an early age, the decrease in patients' interaction with the environment from a very young age, and prejudices of society about the disease increase the loneliness of the patients. As a method of coping, they smoke more leading to further distancing from social life.

**Table 2. Comparison between sociodemographic characteristics of patients with schizophrenia and ISMI scores**

	<b>Alienation</b>	<b>Stereotype Endorsement</b>	<b>Discrimination</b>	<b>Social withdrawal</b>	<b>Stigma Resistance</b>	<b>Total score</b>
<b>Gender</b>						
Male	2.6±0.7	2.4±0.5	2.5±0.7	2.7±0.7	2.4±0.6	2.5±0.5
Female	2.5±0.7	2.4±0.5	2.6±0.6	2.7±0.6	2.3±0.5	2.5±0.4
Test and p value	t=0.306 p=0.760	t=0.700 p=0.485	t=-0.631 p=0.529	t=0.024 p=0.981	t=0.463 p=0.644	t=-0.218 p=0.828
<b>Age group</b>						
16-35	2.5±0.7	2.4±0.5	2.6±0.7	2.7±0.6	2.3±0.6	2.5±0.5
36 and over	2.6±0.7	2.4±0.5	2.5±0.7	2.7±0.6	2.4±0.6	2.5±0.4
Test and p value	t=-0.338 p=0.736	t=-0.527 p=0.599	t=1.205 p=0.231	t=0.441 p=0.660	t=-0.943 p=0.347	t=-0.016 p=0.987
<b>Marital status</b>						
Married	2.6±0.9	2.3±0.6	2.6±0.6	2.9±0.8	2.4±0.8	2.6±0.6
Single/divorced	2.6±0.7	2.5±0.5	2.6±0.5	2.8±0.7	2.4±0.6	2.7±0.5
Test and p value	t=0.103 p=0.918	t=-1.012 p=0.314	t=0.092 p=0.927	t=0.867 p=0.388	t=-0.079 p=0.937	t=0.065 p=0.948
<b>Educational status</b>						
Primary school or unschooled literate	2.6±0.6	2.4±0.5	2.6±0.6	2.8±0.6	2.5±0.5	2.6±0.4
Secondary school and over	2.4±0.7	2.4±0.5	2.5±0.8	2.6±0.7	2.2±0.6	2.4±0.5
Test and p value	t=1.338 p=0.184	t=0.605 p=0.546	t=0.838 p=0.404	t=1.132 p=0.260	t=2.351 p=0.020	t=1.596 p=0.113
<b>Employment status</b>						
Employed	2.76±1.11	2.41±0.79	2.80±0.84	3.29±0.63	2.09±1.01	2.7±0.8
Unemployed	2.58±0.71	2.45±0.50	2.58±0.71	2.80±0.67	2.45±0.59	2.6±0.5
Test and p value	t=0.629 p=0.531	t=-0.214 p=0.831	t=0.770 p=0.443	t=1.902 p=0.060	t=-1.519 p=0.132	t=0.507 p=0.613
<b>Place of living</b>						
City	2.6±0.7	2.4±0.4	2.6±0.7	2.7±0.6	2.4±0.6	2.5±0.4
District or village	2.5±0.8	2.3±0.5	2.5±0.6	2.8±0.7	2.4±0.5	2.5±0.5
Test and p value	t=0.563 p=0.575	t=1.038 p=0.302	t=0.474 p=0.637	t=-0.631 p=0.529	t=-.162 p=0.871	t=0.340 p=0.735
<b>Income level</b>						
Poor	2.7±0.6	2.4±0.4	2.6±0.6	2.8±0.5	2.5±0.5	2.6±0.4
Middle-good	2.5±0.7	2.4±0.5	2.5±0.7	2.7±0.7	2.3±0.6	2.5±0.5
Test and p value	t=1.042 p=0.300	t=0.508 p=0.613	t=0.260 p=0.796	t=1.081 p=0.282	t=1.160 p=0.248	t=1.065 p=0.289
<b>Smoke?</b>						
Yes	2.7±0.7	2.5±0.5	2.7±0.7	2.9±0.7	2.5±0.7	2.6±0.5
No	2.4±0.8	2.4±0.5	2.5±0.7	2.7±0.6	2.4±0.5	2.5±0.5
Test and p value	t=2.284 p=0.024	t=0.937 p=0.351	t=1.065 p=0.289	t=1.365 p=0.175	t=0.623 p=0.535	t=1.861 p=0.065
<b>State of being hospitalized in the last year</b>						
Yes	2.5±0.7	2.4±0.5	2.5±0.7	2.7±0.6	2.4±0.5	2.5±0.5
No	2.6±0.7	2.4±0.4	2.6±0.7	2.7±0.6	2.3±0.7	2.5±0.4
Test and p value	t=-0.662 p=.510	t=-.033 p=0.974	t=-0.200 p=0.842	t=0.028 p=0.978	t=0.922 p=0.359	t=-0.053 p=0.958
<b>History of psychiatric disorders in the family</b>						
Yes	2.5±0.7	2.4±0.5	2.5±0.8	2.7±0.7	2.2±0.6	2.5±0.5
No	2.6±0.6	2.4±0.4	2.6±0.6	2.7±0.5	2.5±0.5	2.5±0.4
Test and p value	t=-.242 p=0.809	t=-.438 p=0.662	t=-0.065 p=0.948	t=-0.485 p=0.629	t=-1.984 p=0.050	t=-.760 p=0.449

ISMI: Internalized Stigma of Mental Illness.

As the frequency of the patients' meeting with friends and that of spending time with partners/special people increased, their alienation scores decreased; as their frequency of meeting with friends, spending time with partners/special people,

**Table 3. Comparison of the Internalized Stigma of Mental Illness (ISMI) Total and Subscale Scores According to the Social Life Evaluation Questionnaire (SLEQ) Results of the Patients**

	Alienation	Stereotype Endorsement	Discrimination	Social withdrawal	Stigma Resistance	Total score
Frequency of meeting with friends						
Never/seldom	2.7±0.6	2.5±0.4	2.6±0.6	2.8±0.5	2.5±0.5	2.6±0.4
Sometimes/often-always	2.0±0.7	2.0±0.5	2.2±0.8	2.3±0.7	2.0±0.6	2.1±0.5
Test and p value	t=4.724 p=0.000	t=4.767 p=0.000	t=2.824 p=0.006	t=4.035 p=0.000	t=3.241 p=0.002	t=5.413 p=0.000
Frequency of meeting with relatives						
Never/seldom	2.6±0.7	2.5±0.5	2.6±0.7	2.8±0.6	2.5±0.6	2.6±0.5
Sometimes/often-always	2.4±0.7	2.3±0.4	2.5±0.7	2.5±0.6	2.2±0.5	2.4±0.4
Test and p value	t=1.025 p=0.308	t=1.572 p=0.119	t=1.006 p=0.317	t=2.011 p=0.004	t=2.736 p=0.007	t=2.120 p=0.036
Spending time with special people						
Never/seldom	2.6±0.6	2.5±0.4	2.6±0.7	2.7±0.5	2.4±0.5	2.6±0.4
Sometimes/often-always	2.3±0.8	2.1±0.6	2.4±0.7	2.6±0.9	2.1±0.6	2.3±0.6
Test and p value	t=1.987 p=0.049	t=2.78 p=0.006	t=0.963 p=0.338	t=.833 p=0.407	t=2.196 p=0.030	t=2.262 p=0.026
State of having a job						
Yes	2.7±0.7	2.4±0.5	2.7±0.7	2.7±0.7	2.4±0.7	2.6±0.5
No	2.5±0.7	2.4±0.5	2.5±0.7	2.7±0.6	2.4±0.5	2.5±0.4
Test and p value	t=1.376 p=0.171	t=-.485 p=0.629	t=1.037p=0.302	t=-0.254 p=0.800	t=0.647 p=0.519	t=.625 p=0.533
State of thinking of working						
No/undecided	2.5±0.7	2.5±0.5	2.5±0.6	2.8±0.6	2.5±0.5	2.6±0.4
Yes	2.5±0.7	2.4±0.5	2.6±0.7	2.7±0.6	2.3±0.6	2.5±0.4
Test and p value	t=0.078 p=0.938	t=1.076 p=0.284	t=-.696 p=0.488	t=.720 p=0.473	t=2.372 p=0.019	t=.823 p=0.412
Frequency of social activity						
Less than 4	2.6±0.6	2.5±0.4	2.6±0.6	2.8±0.6	2.5±0.5	2.6±0.4
5 and over	2.5±0.8	2.2±0.5	2.5±0.7	2.6±0.7	2.2±0.6	2.4±0.5
Test and p value	t=0.835 p=0.405	t=2.874 p=0.005	t=0.949 p=0.345	t=1.924 p=0.057	t=2.138 p=0.035	t=2.218 p=0.029

**Table 4. Relationship between Social Functioning Scale (SFS) Independence-Performance Subscale and the Mean Total Internalized Stigma of Mental Illness (ISMI) and Subscales Scores**

	Alienation	Stereotype endorsement	Discrimination	Social withdrawal	Stigma resistance	Total score
Functional Independence Measure	r=-0.205 p=0.029	r=-0.381 p=0.000	r=-0.140 p=0.140	r=0.231 p=0.014	r=-0.325 p=0.000	r=-0.328 p=0.000

and social activity increased, their stereotype endorsement levels decreased; as their frequency of meeting with friends increased, their discrimination scores decreased; and as their frequency of meeting with friends and relatives increased, their social withdrawal score decreased ( $p<0.05$ ). Patients' resistance to stigmatization decreased as the frequency of

their meeting with friends, meeting their relatives, spending time with partner/special people, and willingness to work increased; as the frequency of meeting with friends, meeting with relatives, spending time with partner/special people, and social activities increased, their total ISMI scores decreased ( $p<0.05$ ). The fact that schizophrenia is perceived as a fright-

ening disease in society and the belief that these patients are confused and offensive cause society to stigmatize these patients. Patients who see that other people stay away from them do not see themselves as a part of society, cut off their communication with people over time by internalizing the stigmatization they experience, and have a proclivity to move away from society.

An analysis was made between the independence-performance subscale of the SFS and ISMI to determine the relationship between the internalized stigma and independence levels of the patients with a diagnosis of schizophrenia. The scores of alienation, stereotype endorsement, social withdrawal, and stigma resistance subscales and the mean ISMI scores significantly correlated with the independence-performance level ( $p < 0.05$ ). This shows there is a linear relationship between the life activities that patients can freely do on their own and their internalized stigma. Ochoa et al.<sup>[31]</sup> (2015) conducted a study with patients with a diagnosis of schizophrenia and found a relationship between the level of social functioning and internalized stigma; furthermore, as the internalized stigma increased the level of social functioning decreased. A study carried out with patients with bipolar affective disorders found as the deterioration increased in functional areas of patients such as introversion, domestic relations, friend relations, participation in social activities, and taking initiative, internalization stigmatization score increased.<sup>[32]</sup> Another study performed with patients with forensic psychiatric disorders found as internalized stigma increased, social functioning decreased.<sup>[12]</sup>

## Conclusion

Patients with a diagnosis of schizophrenia experienced a moderate level of internalized stigma. The majority of patients did not meet with their friends, did not spend time with a partner/special people, and did not work. A significant difference was found between patients' perception of stigmatization and their educational level, smoking status, and social functioning levels. It is suggested that programs to support the social functioning of patients with a diagnosis of schizophrenia be developed, new treatment centers be established, cooperation between institutions such as non-governmental organizations and municipalities be established, and prejudices against the disease be eliminated by raising awareness in society. Psychiatric nurses working in this field should cooperate with institutions and families to increase the functioning level of patients diagnosed with schizophrenia. Finally, further studies conducted with larger sample groups and interventions are suggested.

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