

CLINICAL RESEARCH

The Relationship Between Internalized Stigma, Perceived Social Support and Self-Efficacy in Bipolar Disorder

Bipolar Bozuklukta İçselleştirilmiş Damgalama, Algılanan Sosyal Destek ve Öz Yeterlilik Arasındaki İlişki

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ABSTRACT

Objectives: Many people with mental illness are subject to social and objective exclusion, discrimination, and stigma. One of the mental illnesses most exposed to stigma is bipolar disorder (BD). This study aimed to ascertain patient perceptions of social support and examine the association between internalized stigma, self-esteem, and clinical course in patients with bipolar disorder.

Method: This cross-sectional study enrolled 103 patients with BD. Sociodemographic form, Internalized Stigma of Mental Illness Inventory (ISMI), Rosenberg Self-Esteem Scale (RSE), Multidimensional Scale of Perceived Social Support (MSPSS) were used to collect data in this study.

Results: The mean age of 103 patients with BD was 40.67±10.53. 46 (44.7%) of these participants were female. The ISMI score was higher in patients who were unemployed than in those who were employed (p=0.050). In terms of ISMI scores, those with residual symptoms had significantly higher scores than those without (p=0.001). The ISMI scores of those whose medication was inconsistent were significantly higher than those who were compliant with their medication (p=0.004). ISMI had a positive correlation between the number of depressions (p<0.001; r=0.243); medication non-adherence (p<0.001; r=0.282). ISMI had negative correlation between RSE (r=-0.711; p<0.001); MSPSS (r=-0.384; p<0.001). In multivariate linear regression, internalized stigma was significantly higher among those with low self-esteem, those who reported a lower level of social support from their friends, and those with residual symptoms.

Conclusions: The link between stigma, self-esteem, and social support, and their effects on patients with BD, have important implications for psychiatric care. Direct interventions to reduce the negative effects of stigma in BD deserve clinical attention as they may potentially improve outcomes.

Keywords: Bipolar disorder, stigma, internalized stigma, self-esteem, social support

ÖZ

Amaç: Akıl hastalığı olan birçok insan, sosyal ve nesnel dışlanmaya, ayrımcılığa ve damgalanmaya maruz kalmaktadır. Damgalanmaya en çok maruz kalan ruhsal hastalıklardan biri bipolar bozukluktur (BB). Bu çalışmanın amacı, BB hastalarının içselleştirilmiş damgalanmalarını belirlemek ve algılanan sosyal destek, benlik saygısı ve klinik değişkenler arasındaki ilişkiyi ortaya koymaktır.

Gereç ve yöntem: Bu kesitsel çalışma BB tanılı 103 hasta ile yürütülmüştür. Bu çalışmada veri toplamak için sosyodemografik form, Ruhsal Hastalıkların İçselleştirilmiş Damgalanması Envanteri (ISMI), Rosenberg Benlik Saygısı Ölçeği (RSE), Çok Boyutlu Algılanan Sosyal Destek Ölçeği (MSPSS) kullanılmıştır.

Bulgular: 103 hastanın yaş ortalaması 40.67±10.53 idi. Bu katılımcıların 46'sı (%44.7) kadındı. ISMI puanı, işsiz olanlarda bir işte çalışanlardan daha yüksekti (p=0.050). ISMI skorları açısından rezidüel semptomları olanlar, olmayanlara göre anlamlı olarak daha yüksek skorlara sahipti (p=0.001). İlaçlarını uyumsuzluğu olanların ISMI puanları, ilaçlarına uyumlu olanlara göre anlamlı olarak daha yüksekti (p=0.004). Depresyon sayısı (p<0.001; r=0.243) ve ilaç uyumsuzluğu (p<0.001; r=0.282) ile ISMI arasında pozitif korelasyon vardı. ISMI skoru ile RSE (r=-0.711; p<0.001) ve MSPSS (r=-0.384; p<0.001) arasında ise negatif korelasyon vardı. Çok değişkenli lineer regresyon analizinde düşük benlik saygısına sahip olanlar, arkadaşlarından daha düşük düzeyde sosyal destek bildirenler ve rezidüel semptomları olanlar arasında içselleştirilmiş damgalanma anlamlı olarak daha yüksekti.

Sonuç: Damgalama, benlik saygısı ve sosyal destek arasındaki bağlantı ve bunların BB hastaları üzerindeki etkileri psikiyatrik bakım için önemli çıkarımlara sahiptir. Bipolar bozuklukta damgalanmanın olumsuz etkilerini azaltmaya yönelik doğrudan müdahaleler, hastalık sonuçlarını iyileştirme potansiyeline sahip olabileceğinden klinik olarak göz önünde bulundurulmalıdır.

Anahtar Kelimeler: Bipolar bozukluk, damgalanma, içselleştirilmiş damgalanma, benlik saygısı, sosyal destek

Introduction

Many people with mental illness are subject to social and objective exclusion, discrimination, and stigma (1, 2). The attitudes and beliefs of the society that individuals with mental illnesses will have difficulties in family and social interactions, professional skills, that they cannot be controlled, that they will disrupt the social order and pose a danger to society, leading to the devaluation of patients (3). Individuals who have

mental illness may exhibit a range of psychological reactions to negative stereotypes and stigmatizing attitudes toward their illness. Certain patients can cope with and resist stigma without being influenced by it. Individuals with stigmatizing attitudes may internalize them and retreat from society. When an individual has a high level of internalized stigma, stigma resistance is low. Exclusion from society and identification as the "other"

contribute to the gradual development of internalized stigma. The internalized stigma is characterized as an individual's acceptance of negative social preconceptions (4). The more negative the attitudes and attributions of patients towards mental illnesses, the more intensely they experience internalized stigma processes.

Stigmatization and rejection of the individual by the society or by himself can lead to negative consequences such as avoidance of social interactions, decrease in self-esteem, decrease in quality of life, deterioration in social and occupational functionality, decrease in demand for access to treatment, treatment non-compliance, and deterioration in the clinical course of the disease (5-8). For this reason, it is essential to identify the negative thoughts of patients about their disease and develop strategies to reduce stigma (9, 10).

One of the mental illnesses most exposed to stigma is bipolar disorder (BD) (11, 12). The rates of internalized stigma in BD patients show regional differences. In research conducted in Turkey, Sarisoy et al. found internalized stigma in 18.5% of BD, and Ustundag et al. found it in 46% (13, 14). This rate was reported as 21.7% in a study conducted in 13 European countries, 26.7% in Iran, 28-36% in the USA, 33.7% in Nigeria, and 38.7% in India (11, 15-19). The variation could result from the sample size and study individuals being different. BD is one of the chronic mental illnesses characterized by mood changes ranging from depression to mania and characterized by exacerbation and recovery periods (20). Different degrees of impairment in familial, social, and occupational functionality can be detected in BD (21). Function loss is not restricted to exacerbation phases of the disease but can also occur during remission phases (22). Internalized stigmatization processes are necessary conditions that lead to deterioration in the functionality of BD patients. Additionally, the decreased function associated with BD may result in internalized stigma (23).

Social support networks play a critical role in the life of an individual who has been socialized from infancy. Perceived social support is the confidence that an individual can provide emotional, social, and financial support when needed (24). Social support is critical in the clinical course of BD, which often begins in early adulthood and is characterized by recurring disease episodes (25). According to several reports, when perceived social support grows, the course of the disease is positively affected, and improvements in self-esteem, quality of life, social adaptation skills, and capacity to cope with problems occur (26). Internalized stigma processes are one of the factors affecting perceived social support. Stigmatization processes may cause patients to experience negative feelings such as worthlessness, guilt, and shame, leading to their exclusion from society, alienation, and less demand for support (27, 28).

Self-esteem is one of the psychosocial characteristics most strongly connected with internalized stigma. Self-esteem includes the positive and negative evaluations of the individual about himself and the emotions that arise from these evaluations (29). While exaggerated self-esteem is observed in mania periods in BD patients, a decrease in self-esteem can be observed in depression and well-being periods.

While numerous publications examine internalized stigma processes in individuals with BD, there is a limited study examining the association between internalized stigma and perceived social support, self-esteem, and disease course. This study aimed to ascertain patient perceptions of social support and examine the association between internalized stigma, self-esteem, and clinical course in patients with bipolar disorder. We hypothesize that patients who perceive less social support, have lower self-esteem, and have a poorer clinical outcome have a greater level of internalized stigma.

Method

Study Design

This cross-sectional study was conducted with patients diagnosed with BD who met the inclusion criteria and applied to the Süleyman Demirel University Psychiatry Outpatient Clinic. The procedure and goal of the research were explained to participants verbally and in writing. The mental status examination of the participants who agreed to participate in the study was performed by a psychiatrist, and their socio-demographic and clinical data were noted. The DSM-5 diagnostic criteria were used to confirm disease diagnosis. The Clinical Research Ethics Committee of Süleyman Demirel University Faculty of Medicine approved the study (Date: 02.11.2020, Number: 341). The Helsinki Declaration's guidelines conducted this study

Participants

Inclusion criteria were being between the ages of 18-65, being literate, being diagnosed with BD according to DSM-5, being in remission phase for at least three months (Hamilton Depression Rating Scale (HAM-D) score below 7, Young Mania Rating Scale (YMRS) score below 5), being followed up in our outpatient clinic with a diagnosis of BD for at least six months. Exclusion criteria from the study were determined as mental retardation, dementia, hearing impairment, diagnosis of another psychiatric disease, and being in the acute exacerbation period of the disease, failing to respond to more than 5% of the questionnaire's questions. Since three of the participants did not answer more than 5% of the questionnaire questions, two were excluded from the study because they were in the depression period, and one was in the hypo-mania period during the psychiatric evaluation. Patients who reported that they did not use/forgot to use their medication more

than once a week were defined as non-adherent patients. The information obtained from the patient was cross-checked with relatives who were involved in their care to increase the reliability of the information about their disease. A score of <5 on YMRS defined the presence of residual manic symptoms, while a score of <7 defined on HDRS the presence of residual depressive symptoms.

Main outcome measure

The socio-demographic form, Young Mania Rating Scale, Hamilton Depression Rating Scale, Internalized Stigma of Mental Illness Inventory (ISMI), Rosenberg Self-Esteem Scale, Multidimensional Scale of Perceived Social Support (MSPSS) were used to collect data in this study.

Socio-demographic Form

Age, gender, marital status, educational status, monthly income, age at which the disease first appeared, the number of disease periods and hospital admissions, and medications taken were recorded in this form.

Young Mania Rating Scale (YMRS)

YMRS is a clinical interview scale designed to assess the severity of manic states. It was developed by Young in 1978 (30). The Turkish validity study of the scale was carried out by Karadağ et al. in 2002 (31).

Hamilton Depression Rating Scale (HDRS)

The Hamilton Depression Rating Scale was developed by Hamilton to assess the severity of depression symptoms (32). The Turkish validity and reliability study of the scale was performed by Akdemir et al. in 2001 and the 17-item HDRS had a Cronbach alpha internal consistency coefficient of 0.75 and a split-half reliability coefficient of 0.76, according to the Spearman Brown formula (33).

Internalized Stigma of Mental Illness Inventory (ISMI)

ISMI is a self-report measure of the triple Likert type comprised of 29 items and five subscales [alienation (6 items), stereotype endorsement (7 items), discrimination experience (5 items), social withdrawal (6 items), and stigma resistance (5 items)] established by Boyd-Ritsher et al. in 2003 (17). Ersoy and Varan translated it into Turkish and conducted a study on its validity and reliability and Cronbach's alpha was 0.93 for the total scale and ranged from 0.63 to 0.87 for the ISMI's five subscales (34). Internalized stigmatization increases as the scores obtained from the scale without a cut-off score increase. Increased ISMI scores indicate a higher level of internalized stigma. Only the items on the subscale of resistance to stigma are scored inversely. A decrease in stigma resistance was

interpreted as an increase in this subscale score.

Rosenberg Self-Esteem Scale (RSE)

RSE is a self-report scale designed to assess self-esteem, developed by Rosenberg in 1965 (35). Çuhadaroğlu performed the scale's Turkish validity and reliability study in 1986. The test-retest reliability of the scale was 0.89 and its validity was 0.71 (36). The first ten items of the scale were used in this study. The score range of the four-point Likert scale ranges from 10 to 40. Scores between 10 and 20 indicate low self-esteem, scores between 20 and 30 indicate moderate self-esteem, and scores between 30 and 40 indicate high self-esteem.

Multidimensional Scale of Perceived Social Support (MSPSS)

The scale was developed by Zimert et al. in 1998 to assess perceived social support (37). It is a seven-point Likert-type self-report scale consisting of 12 items and three subscales (Family, Friends, and Significant others). Turkish validity and reliability study was performed by Eker et al. in 2001 and the Cronbach alpha values in the three samples varied from 0.80 to 0.95, indicating strong internal consistency for the three subscales and the whole scale (38). As the scores obtained from the scale without a cut-off point increase, the perceived social support also increases.

Statistical analysis

The data was analyzed using the IBM SPSS Statistics version 26 software package. Summary statistics (mean± standard deviation [SD]) for continuous variables and proportions for categorical variables were utilized in the descriptive analysis of the data. The Mann-Whitney U test or Kruskal-Wallis tests compared ISMI scores with categorical variables that did not have a normal distribution. In contrast, Spearman Correlation analysis was used to analyze the relationship between ISMI/subscales scores and socio-demographic variables. The factors affecting internalized stigmatization were investigated using multivariate linear regression. Estimated coefficients, standard errors, Wald chi-squares, p values, odds ratios, and confidence intervals were used to present the findings (CI). At the 95 percent confidence interval, a p-value of 0.05 was declared statistically significant. With an alpha of 0.05 and a power of 0.95, the anticipated sample size required for this comparison (using G Power 3.1 or comparable tools) is roughly N = 89 while the study included 103 individuals.

Results

The average age of 103 patients with BD was 40.67±10.53. 46 (44.7%) of these participants were female while 57 (55.3%) were male. 36 (35%) of patients had university graduation, 56.3% of patients were living in a city, seven patients (6.8%) were living alone, and

96 (93.2%) patients were living with a family. Most of the patients (66%) were unemployed. Only 4.9% of patients (n=5) were retired due to disability, and 9.7% (n=10) of patients had to leave their jobs due to illness. While none of the patients used substances, 95.1% (n=98) did not use alcohol, and 63.1% (n=65) did not smoke. All other socio-demographical values of patients are shown in Table 1.

If we analyze the subscales scores of ISMI with socio-demographic variables, there was a statistically significant difference between education, living place, and resistance to stigmatization (respectively $p=0.008$; $p=0.029$). University graduated patients had the lowest, and secondary school graduates had the highest resistance scores. Also, in pairwise comparisons, the patients who lived in the city had statistically significantly lower resistance scores than those living in the town/village ($p=0.011$). All socio-demographics were analyzed with all subscale scores, but there was no statistical difference between other demographic factors. The mean score of ISMI was 58.82 ± 15.22 . RSE had a mean score of 28.57 ± 5.57 . The scores of all scales and subscales are shown in table 2.

RSE total score had a moderate negative statistically significant correlation with ISMI total score ($r=-0.711$; $p<0.001$), alienation ($r=-0.607$; $p<0.001$) discrimination experience ($r=-0.605$; $p<0.001$), stereotype endorsement ($r=-0.511$; $p<0.001$) and social withdrawal ($r=-0.627$; $p<0.001$). All other correlations were shown in table 3. Number of hypomania episodes had low positively correlation with discrimination experience ($r=0.239$; $p=0.015$) and social withdrawal ($r=0.199$; $p=0.044$) and also number of depressive episodes had low positive correlation with ISMI total score ($r=0.243$; $p<0.001$), alienation ($r=0.218$; $p=0.027$), stereotype endorsement ($r=0.280$; $p=0.004$), discrimination experience ($r=0.233$; $p=0.018$) and social withdrawal ($r=0.223$; $p=0.024$).

Multivariate linear regression was used to test if socio-demographic variables and the other scale scores significantly predicted internalized stigmatization scores in correlation. The overall regression was statistically significant ($F(5, 97) = 23.81$, $p<0.001$), and 52.8% of the variance in the dependent variable were explained by the independent variables. This was seven steps Backward LS regression model. It was found that Rosenberg self-esteem scale total score ($OR = -1.473$, $p<0.001$) and the friend subscale score ($OR = -0.357$, $p=0.015$) significantly predicted internalized stigmatization. It was found that the presence of residual symptoms increased the internal stigmatization 6.5 times more than the absence of it, and this was statistically significant ($OR = 6.510$, $p=0.049$).

Table 1. Socio-demographic Characteristics of patients with bipolar disorder

Characteristics	n (%)	ISMI (mean \pm SD)	P
Sex			
Female	46 (44.7)	58.32 \pm 2.10	0.801*
Male	57 (55.3)	59.22 \pm 2.12	
Marital Status			
Single	27 (26.2)	58.07 \pm 3.11	0.347**
Married	64 (62.1)	60.17 \pm 1.85	
Widow	12 (11.7)	51.30 \pm 3.96	
Education			
Primary School	30 (29.1)	59.00 \pm 2.79	0.353**
Secondary School	9 (8.7)	57.00 \pm 4.82	
High School	28 (27.2)	62.82 \pm 2.88	
University	36 (35)	56.02 \pm 2.54	
Place of Residence			
Village/Town	17 (16.5)	61.88 \pm 3.86	0.682**
District	28 (27.2)	58.57 \pm 3.02	
City	58 (56.3)	58.05 \pm 1.94	
Monthly Income			
Under the minimum wage	16 (15.6)	59.06 \pm 4.42	0.652**
Minimum wage	33 (32)	60.91 \pm 2.72	
Upper Minimum wage	54 (54.2)	57.48 \pm 1.94	
Living together with			
Alone	7 (6.8)	59.28 \pm 7.70	0.943*
Together with anyone	96 (93.2)	58.79 \pm 1.52	
Working Status			
Unemployed	68 (66)	55.07 \pm 2.42	0.050*
Employed	35 (34)	61.11 \pm 1.87	
Hospitalization (lifetime)			
No	24 (23.3)	58.68 \pm 1.74	0.723*
Yes	79 (76.7)	59.29 \pm 2.99	
Suicide History(lifetime)			
No	69 (67)	56.96 \pm 1.63	0.104*
Yes	34 (33)	62.62 \pm 3.04	
Medication Adherence			
Yes	69 (67)	55.97 \pm 15.34	0.004*
No	34 (33)	64.62 \pm 13.38	
Having residual periods			
Yes	14 (13.6)	72.71 \pm 13.63	0.001*
No	89 (86.4)	56.64 \pm 14.33	
Smoking			
No	65 (63.1)	57.6 \pm 15.36	0.289*
Yes	38 (36.9)	60.92 \pm 14.94	

n=number of participants; SD=standard deviation; The bold value indicates statistically significant. *Mann-Whitney U **Kruskal-Wallis

Table 2. Mean Scores of Questionnaires and Mean Number of Episodes

Questionnaires	Score
	Mean±SD
ISMI	58.82±15.22
Alienation	12.82±4.49
Stereotype Endorsement	12.22±3.35
Discrimination Experience	9.90±3.70
Social Withdrawal	12.58±4.65
Resistance to stigmatization	11.83±3.55
RSE	28.57±5.57
MSPSS	53.92±18.71
Family	20.68±7.26
Friend	17.13±7.58
Special	16.07±7.81
Number of Episodes	Mean±SD
Mania	1.98±1.90
Depressive	1.91±1.57
Hypomania	0.71±1.27
Mixed	0.05±0.23

ISMI=Internalized Stigma of Mental Illness Inventory; RSE=Rosenberg Self-Esteem Scale; MSPSS=Multidimensional Scale of Perceived Social Support; SD=standard deviation.

Table 3. Correlation between ISMI subscale scores and other variables

	ISMI r	Alienation r	Stereotype Endorsement r	Discrimination Experience r	Social Withdrawal r	Resistance to stigmatization r
RSE	-0.711**	-0.607**	-0.511**	-0.605**	-0.627**	-0.343**
MSPSS	-0.384**	-0.295**	-0.197*	-0.275**	-0.339**	-0.356**
Family	-0.296**	-0.219*	-0.116	-0.214*	-0.256**	-0.323**
Friend	-0.372**	-0.276**	-0.218*	-0.295**	-0.350**	-0.278**
Special	-0.217*	-0.178	-0.098	-0.148	-0.178	-0.257**
Number of Depressive Episodes	0.243**	0.218*	0.280**	0.233*	0.223*	-0.022
Number of hypomanic Episodes	0.185	0.144	0.153	0.239*	0.199*	-0.032
Number of Manic Episodes	-0.087	-0.083	-0.025	-0.143	-0.063	-0.002
Number of Mixed Episodes	0.046	0.069	0.065	0.074	0.061	0.008
Working Status	0.194*	0.164	0.149	0.141	0.203*	0.110
Having residual symptoms	0.338**	0.320**	0.174	0.329**	0.332**	0.143
Medication non-adherence	0.282**	0.243*	0.145	0.288**	0.182	0.144
History of homicide	0.210*	0.195*	0.181	0.200*	0.199*	0.077
Family history of mental disorder	0.238*	0.281**	0.279**	0.293**	0.165	-0.099
Suicide attempt in the family	0.208*	0.200*	0.205*	0.195*	0.192	0.075

ISMI=Internalized Stigma of Mental Illness Inventory; RSE=Rosenberg Self-Esteem Scale; MSPSS=Multidimensional Scale of Perceived Social Support. The bold value indicates statistically significant. r=Spearman's correlation coefficients; *p<0.05, **p<0.001

Table 4. Multivariate linear regression analysis for ISMI

Independent Factors	OR	95% CI	
		Lower Bound	Upper Bound
(Constant)	100.674	<0.001	80.590 120.757
RSE	-1.520	<0.001	-1.965 -1.074
MSPSS	0.014	0.994	-3.556 3.584
Family	-0.189	0.918	-3.845 3.467
Friend	-0.376	0.834	-3.918 3.166
Special	0.172	0.924	-3.395 3.739
Working Status	-1.914	0.413	-6.538 2.710
1 Number of depressive episodes	1.182	0.091	-0.191 2.555
Having residual symptoms	4.501	0.204	-2.494 11.496
Medication non-adherence	2.536	0.305	-2.346 7.418
History of homicide	13.385	0.092	-2.217 28.987
Suicide attempt in the family	3.793	0.251	-2.733 10.319
(Constant)	97.146	<0.001	80.738 113.554
RSE	-1.473	<0.001	-1.902 -1.044
Friend	-0.357	0.015	-0.644 -0.070
7 Number of depressions	1.142	0.092	-0.191 2.476
Having residual symptoms	6.510	0.049	0.027 12.994
History of homicide	15.571	0.044	0.392 30.750

RSE=Rosenberg Self-Esteem Scale; MSPSS=Multidimensional Scale of Perceived Social Support; OR=Odds Ratio, 95% CI=95% confidence interval. The bold value indicates statistically significant.

Discussion

The results of this study have significantly improved our understanding of internalized stigma levels in patients with BD and its relationship to various clinical features and self-esteem, and perceived social support. The main finding of this study is that unemployed patients who have more depressive episodes, lower self-esteem, and less perceived social support are more likely to experience internalized stigma.

Among the socio-demographic variables, employment status was significantly associated with self-stigma and area of residence, and education was significantly associated with stigma resistance. Unemployed participants showed a higher level of internalized stigma than employed participants. Consistent with our findings, many previous studies have shown that the unemployed have more stigma (11, 18, 39). The relationship between unemployment and stigma is bidirectional. Patients may stigmatize themselves more with a sense of failure.

Patients' reluctance to engage in social relationships to avoid rejection or discrimination may cause dysfunction. On the other hand, stigmatizing themselves about their illness may result in fewer job applicants and employment-related problems. When the ISMI subscale mean scores and total mean scores were compared by education level and living environment, it was determined that patients with a higher education level and those who lived in cities exhibited higher stigma resistance. It has been observed that persons who exhibit stigma resistance have greater confidence in their capacity to cope with stigma and are less influenced by it (40). Having a high level of education is a protective factor against stereotypes and devaluing attitudes regarding mental illnesses (41). In addition, patients with higher degrees of education may have greater access to appropriate information and treatments that contribute to the long-term consequences of the disease, thus causing them to feel less internalized stigma. It is reported that living in rural areas is a fundamental problem regarding the stigmatization of mental illnesses (42). It is observed that the tendency to explain mental illnesses with supernatural powers and non-medical traditional treatments is more common in rural areas. Relationships are formed more intimately and frequently than in urban areas in rural locations. These may contribute to society internalizing negative sentiments and exhibiting decreased resilience to stigma. Our findings indicated a correlation between stigma resistance and self-esteem and perceived social support. This is consistent with prior studies (40, 41). Individuals with high self-esteem and social support feel more secure and valuable in interpersonal relationships. This could result in patients feeling more accepted and resisting stigma.

When the relationship between ISMI total score

averages and clinical variables was examined in the study, it was determined that there was a statistically significant positive correlation between the number of depressive episodes, residual symptoms, treatment non-adherence, homicide history, family history of mental illness, family history of suicide and ISMI total score averages. In the current study, residual symptoms were not only associated with higher internalized stigma but also predicted internalized stigma. Increased stigma can be both a cause and result of depression, residual symptoms, and aggressive behavior. Internalized stigma causes patients to define themselves as incomplete, insufficient, and strange, as well as to feel miserable, and as a result, patients are more likely to fall into depression. On the other hand, internalized stigma has been shown to decrease help-seeking behavior, resulting in treatment non-adherence and worsening the course of the disease (43). Low self-esteem, which increases internalized stigma in BD patients, is associated with worsening affective symptoms and an increased risk of depressive episode relapse (44). People in the close circle of patients significantly affect patients' perceptions of stigma. In a family setting where the patient also has a relative with a mental disorder, feelings of shame and a tendency to hide the illness may increase (45). Therefore, families may experience a higher patient burden.

When psychosocial and clinical factors were included in our regression model for internalized stigma, we found residual symptoms, low self-esteem, and low perceived social support in the friendship domain predicted a higher internalized stigma level. This result seems similar to the meta-analysis results reporting a consistent relationship between internalized stigma and self-esteem and social support (8). There is a consensus that self-esteem and internalized stigma are variables that mutually affect each other. People with mental disorders labeling themselves as socially unacceptable and internalizing negative prejudices and attitudes towards themselves may lead to self-blame, poorer social functioning, and less empowerment. Exposure to social/internal stigma or discrimination would seem very likely to damage one's sense of self-esteem. Numerous studies have demonstrated that social support, a critical aspect in the course and prognosis of BD, can have beneficial effects on reducing disease recurrence and non-compliance with treatment and increasing patients' functionality (46, 47). It has been shown that perceived social support in BD affects depressive symptoms more than manic symptoms (48). The increase in perceived social support in BD patients has also been associated with faster resolution of mood symptoms and fewer recurrences of depressive episodes (48). Poor social support is associated with a high risk of recurrence (49). These studies revealing perceived support for clinical outcomes in patients with BD suggest that lower social support may increase internalized stigma by leading to poor clinical outcomes. However, causality cannot

be determined in this study.

The cross-sectional design and relatively small sample size of this study limit the generalizability of the results. In addition, another limitation of the study is that the study sample consisted of BD patients who applied to the hospital and were in remission. Our findings do not allow us to make any conclusions about the extent of internalized stigmatization levels of BD patients who experience acute symptoms and do not apply to the hospital.

Conclusion

Despite the limitations, our results provide important information about the relationship between stigma and its domains, self-esteem, perceived social support, and the presence of residual symptoms in BD patients. Internalized stigma may have different effects on the long-term outcomes of patients with BD. Interventions to strengthen and improve self-esteem, social support, and psychological health may be beneficial to increase patients' resistance to stigma and help them cope with internalized stigma. Future research with a longitudinal design and a larger sample size from the community is needed to elucidate the causal links between internalized stigma and BD.

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Informed Consent: The research was carried out voluntarily, and written consent was obtained from the participants.

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Authors Contributions

GÖÜ: Conceptualization; Formal analysis; Investigation; Methodology; Validation; Visualization; Writing-original draft.

BÖ: Data curation; Visualization; Writing-original draft.

Gİ: Investigation; Statistical analysis; Validation; Writing-original draft.

İMA: Conceptualization; Formal analysis; Investigation; Methodology; Project administration; Resources;

Supervision; Validation; Writing-review & editing.

References

- Huggett C, Birtel MD, Awenat YF, et al. A qualitative study: experiences of stigma by people with mental health problems. *Psychol Psychother.* 2018;91:380-97.
- Rusch N, Angermeyer MC, Corrigan PW. Mental illness stigma: concepts, consequences, and initiatives to reduce stigma. *Eur Psychiatry.* 2005;20:529-39.
- Corrigan PW, Rao D. On the self-stigma of mental illness: stages, disclosure, and strategies for change. *Can J Psychiatry.* 2012;57:464-9.
- Rusch N, Corrigan PW, Todd AR, Bodenhausen GV. Implicit self-stigma in people with mental illness. *J Nerv Ment Dis.* 2010;198:150-3.
- Clement S, Schauman O, Graham T, et al. What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychol Med.* 2015;45:11-27.
- Pal A, Sharan P, Chadda RK. Internalized stigma and its impact in Indian outpatients with bipolar disorder. *Psychiatry Res.* 2017;258:158-65.
- Post F, Pardeller S, Frajo-Apor B, et al. Quality of life in stabilized outpatients with bipolar I disorder: Associations with resilience, internalized stigma, and residual symptoms. *J Affect Disord.* 2018;238:399-404.
- Livingston JD, Boyd JE. Correlates and consequences of internalized stigma for people living with mental illness: a systematic review and meta-analysis. *Soc Sci Med.* 2010;71:2150-61.
- Alonso M, Guillen AI, Munoz M. Interventions to Reduce Internalized Stigma in individuals with Mental Illness: A Systematic Review. *Span J Psychol.* 2019;22:E27.
- Tsang HW, Ching SC, Tang KH, et al. Therapeutic intervention for internalized stigma of severe mental illness: A systematic review and meta-analysis. *Schizophr Res.* 2016;173:45-53.
- Brohan E, Gauci D, Sartorius N, Thornicroft G, Group GA-ES. Self-stigma, empowerment and perceived discrimination among people with bipolar disorder or depression in 13 European countries: the GAMIAN-Europe study. *J Affect Disord.* 2011;129:56-63.
- Latalova K, Ociskova M, Prasko J, et al. Self-stigmatization in patients with bipolar disorder. *Neuro Endocrinol Lett.* 2013;34:265-72.
- Sarisoy G, Kacar OF, Pazvantoglu O, et al. Internalized stigma and intimate relations in bipolar and schizophrenic patients: a comparative study. *Compr Psychiatry.* 2013;54:665-72.
- Ustundag MF, Kesebir S. [Internalized stigmatization in bipolar patients: relationship with clinical properties, quality of life and treatment compliance]. *Turk Psikiyatri Derg.* 2013;24:231-9.
- Ibrahim AW, Mukhtar YM, Sadique PK, et al. A facility-based assessment of internalized stigma among patients with severe mental illnesses in Maiduguri, North-Eastern Nigeria. 2016;6:1-11.
- James TT, Kutty VR. Assessment of internalized stigma among patients with mental disorders in Thiruvananthapuram district, Kerala, India. *Asia Pac J Public Health.* 2015;27:439-49.
- Ritsher JB, Otilingam PG, Grajales M. Internalized stigma of mental illness: psychometric properties of a new measure. *Psychiatry Res.* 2003;121:31-49.
- Sadighi G, Khodaei MR, Fadaie F, Mirabzadeh A, Sadighi A. Self stigma among people with bipolar-I disorder in Iran. *Iranian Rehabilitation Journal.* 2015;13:28-32.
- West ML, Yanos PT, Smith SM, Roe D, Lysaker PH. Prevalence of Internalized Stigma among Persons with Severe Mental Illness. *Stigma Res Action.* 2011;1:3-10.
- Grande I, Berk M, Birmaher B, Vieta E. Bipolar disorder. *Lancet.* 2016;387:1561-72.

21. Akers N, Lobban F, Hilton C, Panagaki K, Jones SH. Measuring social and occupational functioning of people with bipolar disorder: A systematic review. *Clin Psychol Rev.* 2019;74:101782.
22. Chen M, Fitzgerald HM, Madera JJ, Tohen M. Functional outcome assessment in bipolar disorder: A systematic literature review. *Bipolar Disord.* 2019;21:194-214.
23. Wang J, Mann F, Lloyd-Evans B, Ma R, Johnson S. Associations between loneliness and perceived social support and outcomes of mental health problems: a systematic review. *BMC Psychiatry.* 2018;18:156.
24. Au CH, Wong CS, Law CW, Wong MC, Chung KF. Self-stigma, stigma coping and functioning in remitted bipolar disorder. *Gen Hosp Psychiatry.* 2019;57:7-12.
25. Greenberg S, Rosenblum KL, McInnis MG, Muzik M. The role of social relationships in bipolar disorder: a review. *Psychiatry Res.* 2014;219:248-54.
26. Hawke LD, Parikh SV, Michalak EE. Stigma and bipolar disorder: a review of the literature. *J Affect Disord.* 2013;150:181-91.
27. Levy B, Tsoy E, Brodt M, Petrosyan K, Malloy M. Stigma, social anxiety, and illness severity in bipolar disorder: Implications for treatment. *Ann Clin Psychiatry.* 2015;27:55-64.
28. Rusch N, Todd AR, Bodenhausen GV, Olschewski M, Corrigan PW. Automatically activated shame reactions and perceived legitimacy of discrimination: A longitudinal study among people with mental illness. *J Behav Ther Exp Psychiatry.* 2010;41:60-3.
29. Nilsson KK, Jorgensen CR, Craig TK, Straarup KN, Licht RW. Self-esteem in remitted bipolar disorder patients: a meta-analysis. *Bipolar Disord.* 2010;12:585-92.
30. Young RC, Biggs JT, Ziegler VE, Meyer DA. A rating scale for mania: reliability, validity and sensitivity. *Br J Psychiatry.* 1978;133:429-35.
31. Karadag F, Oral T, Yalcin FA, Erten E. [Reliability and validity of Turkish translation of Young Mania Rating Scale]. *Türk Psikiyatri Derg.* 2002;13:107-14.
32. Hamilton M. A rating scale for depression. *J Neurol Neurosurg Psychiatry.* 1960;23:56-62.
33. Akdemir A, Turkcapar MH, Orsel SD, et al. Reliability and validity of the Turkish version of the Hamilton Depression Rating Scale. *Compr Psychiatry.* 2001;42:161-5.
34. Ersoy MA, Varan A. Ruhsal hastalıklarda içselleştirilmiş damgalanma ölçeği Türkçe formu'nun güvenilirlik ve geçerlik çalışması. *Türk Psikiyatri Dergisi.* 2007;18:163-71.
35. Rosenberg M. Rosenberg self-esteem scale (RSE). Acceptance commitment therapy Measures package. 1965;61:18.
36. Çuhadaroğlu F. Adölesanlarda benlik saygısı [Uzmanlık Tezi] Hacettepe Üniversitesi Tıp Fakültesi. Ankara; 1986.
37. Zimet GD, Dahlem NW, Zimet SG, Farley G. The multidimensional scale of perceived social support. *Journal of personality assessment.* 1988;52:30-41.
38. Eker D, Arkar H. Factorial structure, validity, and reliability of revised form of the multidimensional scale of perceived social support. *Türk Psikiyatri Dergisi.* 2001;12:17-25.
39. Zhi-guo W, Cheng-mei Y, Zhen W. Self-stigma in patients with mood disorders and its related factors. *Journal of Shanghai Jiaotong University.* 2011;31:1527.
40. Lau YW, Picco L, Pang S, et al. Stigma resistance and its association with internalised stigma and psychosocial outcomes among psychiatric outpatients. *Psychiatry Res.* 2017;257:72-8.
41. Shumet S, B WM, Angaw D, Ergete T, Alemnew N. Magnitude of internalised stigma and associated factors among people with bipolar disorder at Amanuel Mental Specialized Hospital, Addis Ababa, Ethiopia: a cross-sectional study. *BMJ Open.* 2021;11:e044824.
42. Olcay Ç, ÇUHADAR D. Bipolar bozukluğu olan hastalarda işlevsellik düzeyi ve içselleştirilmiş damgalama arasındaki ilişkinin belirlenmesi. *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi.* 2013;2:230-46.
43. Perich T, Mitchell PB, Vilus B. Stigma in bipolar disorder: A current review of the literature. *Aust N Z J Psychiatry.* 2022;48:674221080708. [published online ahead of print, 2022 Feb 16]. doi:10.1177/00048674221080708
44. Scott J, Pope M. Cognitive styles in individuals with bipolar disorders. *Psychol Med.* 2003;33:1081-8.
45. Baysal GÖD. Damgalanma ve ruh sağlığı. *Arşiv Kaynak Tarama Dergisi.* 2013;22:239-51.
46. Aldinger F, Schulze TG. Environmental factors, life events, and trauma in the course of bipolar disorder. *Psychiatry Clin Neurosci.* 2017;71:6-17.
47. Dunne L, Perich T, Meade T. The relationship between social support and personal recovery in bipolar disorder. *Psychiatr Rehabil J.* 2019;42:100-3.
48. Johnson SL, Winett CA, Meyer B, Greenhouse WJ, Miller I. Social support and the course of bipolar disorder. *J Abnorm Psychol.* 1999;108:558-66.
49. Johnson L, Lundstrom O, Aberg-Wistedt A, Mathe AA. Social support in bipolar disorder: its relevance to remission and relapse. *Bipolar Disord.* 2003;5:129-37.