

# The Relationship of Perceived Social Support with Level of Insight and Treatment Adherence in Individuals Diagnosed with Schizophrenia and Bipolar Disorder

## Şizofreni ve Bipolar Bozukluk Tanılı Bireylerde Algılanan Sosyal Desteğin İçgörü Düzeyi ve Tedavi Uyumuyla İlişkisi

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### ÖZ

**Amaç:** Bu çalışmada bipolar ve şizofreni tanılı hastaların algıladıkları sosyal desteğin tedavi uyumları ve içgörü düzeyleriyle ilişkisinin belirlenmesi amaçlanmıştır.

**Araçlar ve Yöntem:** Bu araştırma son 1 yıl içinde kliniğimizde yatarak tedavi görmüş, remisyon döneminde olan, 55 bipolar ve 55 şizofreni tanılı hasta olmak üzere 110 birey ile yürütülmüştür. Katılımcılara sosyodemografik ve klinik veri formu, Young Mani Derecelendirme Ölçeği (YMDÖ), Klinik Global İzlenim Ölçeği (CGİ), İçgörünün Üç bileşenini Değerlendirme Ölçeği (İÜBDÖ), Morisky Tedavi Uyum Ölçeği (MTUÖ) ve Çok Boyutlu Algılanan Sosyal Destek Ölçeği (ÇBASD) uygulanmıştır.

**Bulgular:** Bipolar hastaların yaş ortalaması 40.47±12.96, şizofreni tanılı hastaların yaş ortalaması 40.45±11.71 idi. Algılanan aile, arkadaş, özel biri desteği ve total destek puanı bipolar hastalarda anlamlı (p=0.000, p=0.000, p=0.004, p=0.000, sırasıyla) yüksek saptanmış olup, en yüksek destek aileden, ardından arkadaş ve önemli kişilerden algılanmıştır. Gruplar tedavi uyumları açısından farklılık (p=0.083) göstermemekle birlikte, iç görü puanı bipolar hastalarda anlamlı yüksekti (p=0.001). Gruplar algılanan sosyal desteği etkileyen faktörler açısından hiyerarşik regresyon analiziyle değerlendirilmiştir. Cinsiyet, eğitim yılı, içgörü ve tedavi uyumunun sosyal destek için prediktif (p=0.04, p=0.01, p<0.001, p=0.01, sırasıyla) olduğu görülmüştür.

**Sonuç:** Bipolar ve şizofren hastalara bakım verenlerin (aile vb.) sosyal desteğin klinik gidişe etkisi konusunda bilgilendirilmesi içgörü ve tedavi uyumuna olumlu katkı sağlayarak bakım verenlerin yükünü azaltabilir.

**Anahtar Kelimeler:** algılanan aile desteği; kronik ruhsal hastalıklar; tedavi

### ABSTRACT

**Purpose:** This study aims to examine the relationship between perceived social support, insight, and treatment adherence in patients with schizophrenia and bipolar disorder.

**Materials and Methods:** This study was conducted with 110 individuals, including 55 bipolar and 55 schizophrenia patients, who had been hospitalized in our clinic in the last 1 year and were in remission. Participants were administered a sociodemographic and clinical data form, Young Mania Rating Scale (YMDÖ), Clinical Global Impression Scale (CGI), Three Components of Insight Rating Scale (İÜBDÖ), Morisky Treatment Compliance Scale (MTUÖ) and Multidimensional Perceived Social Support Scale (MSPSS).

**Results:** The mean age was 40.47±12.96 for bipolar patients and 40.45±11.71 for schizophrenics. Perceived family, friend, significant others support, and total support was found to be higher (p=0.000, p=0.000, p=0.004, p=0.000, respectively) of bipolar patients, and the highest support was perceived from family, followed by friends and significant people. Although the groups did not differ in terms of treatment adherence (p=0.083), the insight score was significantly higher in bipolar patients (p=0.001). Groups were evaluated with hierarchical regression analysis in terms of factors affecting perceived social support. Gender, years of education, insight, and treatment adherence were found to be predictive of social support (p=0.04, p=0.01, p<0.001, p=0.01, respectively).

**Conclusion:** Informing caregivers (family, etc.) of bipolar and schizophrenic patients about the effect of social support on clinical outcome may reduce the burden of caregivers by contributing positively to insight and treatment compliance.

**Keywords:** chronic mental illness; perceived family support; treatment

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## INTRODUCTION

Schizophrenia and bipolar disorder are lifelong psychiatric diseases that begin at an early age and, are characterized by aggravations, remissions, and relapses. Individuals with bipolar disorder and schizophrenia have a poor quality of life due to factors such as residual symptoms, medication side effects, and lack of social support, even if they have achieved clinical remission. Social support is defined as helpful people experiencing stress or difficulties with those around them.<sup>1</sup> Perceived social support, on the other hand, includes how aware people are of their social support network and how satisfied they are with it, and this is considered a better psychological sign than objectively measured social support.<sup>2</sup> In a study evaluating social support in bipolar patients, it was reported that high-level social support decreases recurrence through increased treatment adherence.<sup>3</sup> Cohen et al. reported that low social support predicted the recurrence of depressive episodes. Also, the perception of social support came from friends, parents, and partners related to decreased number of depressive attacks and hospitalization.<sup>4</sup> Similarly, social support is one of the factors that influence symptom severity, recovery, and adherence to medication in schizophrenia patients.<sup>5</sup> However, social support systems for schizophrenia patients are not sufficient due to stigma, exclusion, and isolation.<sup>6</sup>

Insight is defined as acknowledging that one has a mental illness, being aware of their symptoms, and accepting treatment.<sup>7</sup> Studies evaluating the relationship between insight and clinical features in bipolar patients have associated better insight with fewer attacks, fewer hospitalizations, and a longer duration of illness.<sup>8</sup> In studies evaluating insight in psychotic disorders, especially schizophrenia; lack of insight has been associated with increased hospitalization rate, adverse clinical outcomes decreased psychosocial functioning and impaired adherence to treatment.<sup>9</sup>

Treatment adherence is the degree to which a person accepts the behaviors (medication, etc.) recommended by healthcare providers. Especially in schizophrenic patients, regular drug use and compliance with medical recommendations are of primary importance for the success of treatment. However, in studies conducted in our country, it has

been reported that treatment non-compliance is common in patients with schizophrenia.<sup>10,11</sup> Treatment non-adherence is a common problem in bipolar patients, and it can lead to an increase in hospitalization rates, care costs, mortality, suicide attempts, and decreased functionality.<sup>13</sup> However, there are a limited number of studies evaluating social support, insight, and adherence to treatment in patients with bipolar disorder and schizophrenia. This study aims to determine the relationship between perceived social support, insight levels, and treatment adherence in patients with schizophrenia and bipolar disorder hospitalized in the psychiatry clinic in the last 1 year.

## MATERIALS and METHODS

Approval for the study was received from Kırıkkale University Faculty of Medicine Non-Interventional Research Ethics Committee (Date: 16.09.2021 and numbered 2021.09.09). The principles of the Declaration of Helsinki were followed throughout the research. This is a cross-sectional and descriptive study. Schizophrenia and bipolar patients who were hospitalized Kırıkkale University Faculty of Medicine psychiatry service between 01.07.2020 and 01.07.2021 were included in the study. During this period, 135 patients received inpatient treatment with various diagnoses, and 125 of these patients were diagnosed with bipolar disorder and schizophrenia. Among these individuals, 110 patients (55 bipolar, 55 schizophrenia) who were in remission and had regular outpatient visits after discharge were included in our study.

Among these individuals, 110 patients (55 bipolar, 55 schizophrenic) between the ages of 18-65 who were in remission and had regular outpatient visits after discharge were included in our study. Exclusion criteria from the study include a diagnosis of alcohol and/or substance abuse disorder, a diagnosis of mental retardation, and a lack of cooperation that cannot answer questions. Data were collected between 16.09.2021 and 20.03.2022.

Sociodemographic and clinical data form, Young Mania Rating Scale (YMRS), Clinical Global Impressions Scale (CGI), Schedule for Assessment of Insight (SAI), Morisky Medication Adherence Scale (MMAS), and Multidimensional Scale of Perceived Social Support (MSPSS) were administered to the participants.

**Sociodemographic and clinical data form:** was prepared by the researchers. The participants' socio-demographics (gender, etc.) and clinical characteristics (application type, length of hospital stay, etc.) were recorded.

**Young Mania Rating Scale (YMDS):** It is a scale filled in to assess manic symptoms based on the state of the past 48 hours. Turkish reliability and validity studies were conducted.<sup>14</sup>

**Clinical Global Impressions Scale (CGI-s):** It is a three-dimensional (illness severity, recovery, and side effect) scale that evaluates the clinical course of psychiatric disorders. In this study, severity (Clinical Global Impression-Violence) and side effect (Clinical Global Impression-Side Effect) sub-dimensions were used.<sup>15</sup>

**Schedule for Assessment of Insight (SAI):** The scale has eight questions and insight is evaluated in three dimensions. These are; (a) awareness of the illness, (b) abnormal evaluation of psychotic experiences, and (c) adherence to treatment. Turkish validity and reliability study was conducted and applied by the clinician. The highest score of the first seven questions is 14, and it is left to the clinician whether to ask the eighth question. As the score obtained from the scale increases, the level of insight increases.<sup>16</sup>

**Morisky Medication Adherence Scale (MMAS):** The scale consists of four questions and the answer is "yes/no". If all questions are answered "no", drug compliance is considered high, if one or two questions are answered "yes", drug compliance is considered medium, if three or four questions are answered "yes", drug compliance is considered low. A low score on the scale indicates high adherence to treatment. The Turkish validity and reliability study was conducted by Yilmaz.<sup>17</sup>

**Multidimensional Perceived Social Support Scale (MPSS):** The scale consists of a total of 12 items and has sub-dimensions of family support, friend support, and special support. The scale is a 7-point Likert-type scale with the form "Absolutely no 1,2,3,4,5,6,7 Definitely yes". The score of the scale varies between 12 to 84 and there is no cut-off point. A high score on the scale means high perceived social support. The MPSS has shown high internal

reliability (Cronbach's alpha =.87, .85, and .91 respectively for the Family, Friends and Significant Others subscales).<sup>2</sup>

### Statistical Analysis

SPSS 21 (SPSS Inc., Chicago, Ill, USA) program was used in the analysis of the data. Skewness and kurtosis tests were applied to show whether the continuous variables were normally distributed and it was seen that the data were normally distributed. Continuous variables were expressed as mean and standard deviation. Student's t-test and Chi-square were used for comparisons between groups in terms of demographic and clinical characteristics. The relationship between perceived social support, clinical characteristics, insight, and adherence to treatment in bipolar and schizophrenic patients was evaluated with the Pearson correlation coefficient. Hierarchical Regression Analysis was used to evaluate the factors affecting social support (age, years of education, number of hospitalizations, length of hospital stay, number of suicides, disease duration, insight, and treatment compliance scores). Significance level was  $p < 0.05$ .

### RESULTS

In our study, the mean age was  $40.47 \pm 12.96$  for bipolar patients and  $40.45 \pm 11.71$  for schizophrenics. Demographic and clinical characteristics were similar between the groups ( $p > 0.05$ ) (Table 1). However, long-acting injection use was significantly higher in the schizophrenics ( $p = 0.004$ ). When we evaluated with MSPSS (high/medium/low) in terms of treatment adherence, 6 (10.6%) patients were low adherence, 34 (61.8%) patients were moderately compatible, and 15 (13%) patients were highly compatible in the bipolar group. In the schizophrenia group, 12 (21.8%) patients were low adherent, 36 (65.5%) were moderate adherent, and 7 (12.7%) were high adherent. The groups were similar in terms of treatment compliance ( $p = 0.083$ ). The SAI score was significantly higher in bipolar patients ( $p = 0.001$ ). When evaluated in terms of perceived social support; perceived family support ( $p = 0.000$ ), friend support ( $p = 0.000$ ), special person support ( $p = 0.004$ ), and perceived total support score ( $p = 0.000$ ) were statistically significantly higher in bipolar patients. When the groups were evaluated in terms of CGI

scale severity and side effect sub-dimensions, severity scores were statistically significantly higher in the schizophrenia group (p=0.00). However, there was no significant

difference (p=0.87) between the groups in terms of side effect scores (Table 2).

**Table 1.** Socio-demographic characteristics of bipolar and schizophrenic patients.

Socio-demographic characteristics	Bipolar disorder (n=55)	Schizophrenia (n=55)	p
Age	40.47 (±12.96)	40.45 (±11.71)	0.994
Gender			
Female	32 (%8.2)	28 (% 50.9)	0.448
Male	23 (%41.8)	25 (% 49.1)	
Education Level			
Primary school	17 (%30.9)	19 (%34.5)	
Middle school	14 (%25.5)	17 (%30.9)	0.214
High school	12 (%21.8)	14 (%25.5)	
University	12 (%21.8)	5 (%9.1)	
Education year	9.76 (±4.26)	8.58 (±3.57)	0.118
Marital status			
Single	22 (%40)	23 (%41.8)	
Married	23 (%41.8)	23 (%41.8)	0.795
Divorced	10 (%18.2)	9 (%16.4)	
Employment			
Employee	7 (%12.7)	7 (%12.7)	
Housewife	19 (%34.5)	21 (%38.2)	0.850
Disabled	15 (%27.3)	13 (%23.6)	
Student	14 (%25.5)	14 (%25.5)	

Values; mean±standard deviation, presented as a percentage (%), \*p<0.05

**Table 2.** Comparison of the groups in terms of Clinical features, Perceived Social Support, Insight and Adherence to Treatment.

Variables		Bipolar Disorder	Schizophrenia	P
		N (%)	N (%)	
Admission site	Policlinic	45 (%81.8)	40 (%72.7)	0.182
	Emergency	10 (%18.2)	15 (%27.3)	
Reason for admission	Attack period	35 (%63.6)	33 (%60)	0.422
	Diagnosis/treatment	20 (%36.4)	22 (%40)	
Axis 2	Yes	13 (%23.6)	6 (%10.9)	0.064
	No	42 (%76.4)	49 (%89.1)	
Physical illness	Yes	15 (%27.3)	10 (%18.2)	0.182
	No	40 (%72.7)	45 (%81.8)	
Attempted suicide	Yes	13 (%23.6)	9 (%16.4)	0.238
	No	42 (%76.4)	46 (%83.6)	
Cigarette	Yes	43 (%78.2)	45 (%81.8)	0.406
	No	12 (%21.8)	10 (%18.2)	
LAI	Yes	7 (%12.7)	20 (%36.4)	0.004*
	No	48 (%87.3)	35 (%63.6)	
MMAS	Low	6 (%10.9)	12 (%21.8)	0.083
	Medium	34 (%61.8)	36 (%65.5)	
	High	15 (%27.3)	7 (%12.7)	
Disease duration		12.42 (± 11.03)	13.25 (± 10.32)	0.682
Number of hospitalizations		4.64 (± 4.20)	4.16 (± 2.69)	0.484
Duration of hospitalization		19.18 (± 10.81)	19.85 (± 10.50)	0.741
MPSSS	Family	24.56 (± 3.34)	19.76 (± 6.36)	<0.001**
	Friends	13.84 (± 5.95)	8.71 (± 5.40)	<0.001**
	Significant Others	10.13 (± 6.54)	5.93 (± 4.21)	<0.001**
	Total Perceived Social Support	48.47 (± 11.01)	34.33 (± 11.43)	<0.001**
CGI-S		1.49 (±.63)	2.22 (±.60)	<0.001**
CGI-SE		1.44 (±.57)	1.36 (±.52)	0.487
SAI		10.24 (± 3.39)	7.62 (± 3.24)	<0.001**
MMAS		1.45 (± 1.10)	1.85 (± 1.06)	0.05

Abbreviations: MMAS: Morisky Medication Adherence Scale, LAI: long-acting injection, MPSSS; Multidimensional Perceived Social Support Scale, CGI-S; Clinical Global Impression-illness severity, CGI-SE; Clinical Global Impression- side effects, SAI; Schedule for Assessment of Insight, MMAS; Morisky Medication Adherence Scale, \*p<0.05, \*\*p<.001

In bipolar patients; there was a negative correlation between perceived friend support and total support and disease severity (r=-.292, p<0.05, r=-.288, p<0.05), and a positive correlation with years of education(r=.472, p<0.001, r=.276, p<0.05). A significant negative correlation was found between MSPSS score and perceived family support (r=-.333, p<0.05), friend support (r=-.488

p<0.001), special someone support sub-dimension (r=-.432, p<0.001), and perceived total support(r=-.612, p<0.001). In addition, a significant positive correlation was found between the SAI score and all sub-dimensions of perceived social support (r=.392, p<0.001, r=.349, p<0.001, r=.416, p<0.001, r=.547, p<0.001, respectively) (Table 3).

**Table 3.** The relationship between schizophrenic and bipolar patients' perceived social support and other factors.

Group Variables	Bipolar Disorder				Schizophrenia			
	Family	Friends	Significant Others	Total Perceived Social Support	Family	Friends	Significant Others	Total Perceived Social Support
Age	-.172	-.243	.093	-.137	-.138	-.059	-.011	-.111
Education Year	.176	.472**	.099	.276*	.167	.255	.374**	.358**
Number of hospitalizations	.154	-.017	-.188	-.073	-.066	-.330*	-.302*	-.309*
Duration of hospitalization	.064	.067	-.108	-.003	-.089	-.280*	-.050	-.209
Number of suicides	-.021	-.088	-.047	-.079	-.085	.027	-.128	-.079
Disease duration	-.072	-.285*	-.003	-.174	-.280*	-.030	.001	-.172
CGI-S	-.142	-.292*	-.162	-.288*	-.205	-.180	-.243	-.297*
CGI-SE	-.053	-.071	-.239	-.157	-.107	-.231	0,063	-.154
SAI	.392**	.349**	.416**	.547**	.270*	.291*	.202	.371**
MMAS	-.333*	-.488**	-.432**	-.612**	-.263*	-.334	-.201	-.391**

Abbreviations: MPSSS; Multidimensional Perceived Social Support Scale, CGI-S; Clinical Global Impression-illness severity, CGI-SE; Clinical Global Impression-side effects, SAI; Schedule for Assessment of Insight, MMAS; Morisky Medication Adherence Scale, Presented with Pearson Correlation Coefficients, \*p<0.05, \*\*p<0.001 \*\*\*p<0.001.

In the schizophrenia group, a significant positive correlation was found between years of education and perceived special person support sub-dimension ( $r=.374$ ,  $p<0.001$ ) and perceived total support ( $r=.358$ ,  $p<0.001$ ). A negative relationship was found between the number of hospitalizations and the support of friends ( $r=-.330$ ,  $p<0.05$ ), support for a special person ( $r=-.302$ ,  $p<0.05$ ), and total support ( $r=-.309$ ,  $p<0.05$ ). A significant negative correlation was found between disease duration and perceived family support ( $r=-.280$ ,  $p<0.05$ ). A significant negative correlation was found between disease severity and total support ( $r=-.297$ ,  $p<0.05$ ). A positive correlation was found between

the score of SAI and family support ( $r=.270$ ,  $p<0.05$ ), friend support ( $r=.291$ ,  $p<0.05$ ), and perceived total support ( $r=.371$ ,  $p<0.001$ ). A negative correlation was found between the MSPSS score and the sub-dimension of family support ( $r=-.263$ ,  $p<0.05$ ) and total support ( $r=-.391$ ,  $p<0.001$ ) (Table 3).

Hierarchical regression analyzes were performed to determine the contribution of these variables. Accordingly, gender, years of education, insight, and treatment compliance were found to predict perceived total support ( $p=0.04$ ,  $p=0.01$ ,  $p<0.001$ ,  $p=0.01$ , respectively)(Table 4).

**Table 4.** Examination of the factors affecting social support by Hierarchical Regression Analysis.

Model	Predictor	B	SE B	$\beta$	p	R <sup>2</sup>	$\Delta$ R <sup>2</sup>
1	Constant	36.36	6.59		0.00		
	Gender	-12.98	2.8	-0.493	<b>0.04</b>	0.35	0.34
	Age	0.06	0.10	0.059	0.53		
	Education year	0.82	0.32	0.24	<b>0.01</b>		
2	Number of hospitalizations	-0.07	0.36	-0.01	0.85		
	Duration of hospitalization	-0.08	0.10	-0.07	0.42		
	Number of suicides	-1.17	1.17	-0.08	0.32		
	Disease duration	-0.16	0.14	-0.13	0.24		
3	CGI-S	-3.24	2.3	-0.17	0.12	0.44	0.38
	CGI-SE	-0.57	2.17	-0.02	0.79		
4	SAI	1.29	0.33	0.34	<b>0.00</b>	0.52	0.46
5	MMAS	-3.16	1.20	-0.26	<b>0.01</b>	0.55	0.49

Abbreviations: MPSSS; Multidimensional Perceived Social Support Scale, CGI-S; Clinical Global Impression-illness severity, CGI-SE; Clinical Global Impression-side effects, SAI; Schedule for Assessment of Insight, MMAS; Morisky Medication Adherence Scale,  $p<0.05$ ,  $p<0.001$

## DISCUSSIONS

Social support is one of the most effective tools for coping with and adapting to difficult and stressful events and po-

sitively affects the process and results of psychiatric treatment and psychotherapy.<sup>18</sup> In our study, the perceived family, friend, and personal support and total support were found to be significantly higher in bipolar patients, and the family perceived the highest support, followed by friends

and important people. In addition, years of education, insight, and treatment compliance were found to be predictors of perceived social support.

In our study, perceived social support was found to be higher in bipolar patients than in schizophrenics in all areas. One study evaluating schizophrenic and bipolar patients in terms of perceived social support reported that social support was significantly higher in bipolar patients.<sup>19</sup> In a study evaluating schizophrenic and bipolar patients in terms of internalized stigma, self-esteem, and perceived social support, it was reported that there was no difference between the groups.<sup>20</sup> In the study about schizophrenia and bipolar patients in remission evaluated in terms of their perceived social support and quality of life analyzed that perceived social support is higher in the schizophrenia group.<sup>21</sup> Our study results were similar to the results of Singh et al. This could be explained by the fact that our patients are in remission, and our bipolar patients use mood stabilizers, which are drugs that require more frequent and regular follow-ups.

The highest level of support was perceived from family, followed by friends and important people for bipolar and schizophrenic patients. This could be explained by the fact that the majority of individuals with chronic mental illness generally live with their families. Similar results were reported in the study examining the social networks of people with chronic mental illness, and it suggested that the patients' social networks were formed by family members at a higher rate.<sup>22</sup> The fact that the patients received the least support from a private person can be explained by the fact that most of these patients are single and lack a special relationship, as reported in the literature. Another study reported that social support was received from family, friends, and important people, respectively about examining the relationship between suicidal behavior and perceived social support in bipolar patients in remission.<sup>23</sup> Similar results were reported in the study by Uygun et al.<sup>24</sup> In a study focused on patients diagnosed with schizophrenia, it was reported that perceived support came mostly from family and other important people after friends.<sup>25</sup>

When the groups were evaluated in terms of insight, it was observed that insight was high in bipolar patients. Although there is limited data on insight in bipolar patients, it

was reported that patients with a diagnosis of schizophrenia showed weaker insight into a mental disorder and its social consequences in a study bipolar and schizophrenic patients in remission evaluated in terms of insight.<sup>26</sup>

In the bipolar group, although perceived social support decreased as the severity of the illness increased, no similar correlation was found with the duration of the illness, the number of hospitalizations, and the length of hospitalization. This may be associated with sub-threshold symptoms, which are known to have a significant impact on the course of the disease and well-being. In a study evaluating perceived social support in bipolar patients, it was reported that there was no significant relationship between social support and the number of attacks or hospitalizations. However, it was found that subthreshold depressive symptoms decreased with the increase in social support.<sup>23</sup> Similarly, Staner et al. showed that social support is not a risk factor for relapse<sup>27</sup> and our result is similar to the literature in this respect. In bipolar patients, a significant positive correlation was found between insight and the support of friends, the support of a special person sub-dimension, and total support. Another study evaluating insight and treatment adherence in bipolar patients reported that higher insight facilitated support from family and friends.<sup>28</sup> This situation could be explained by the fact that it is difficult to maintain social ties such as friendship and marriage due to a lack of insight, more attacks, and a decrease in psychosocial functionality. In addition, it was observed that bipolar patients with good adherence to treatment had higher perceptions of social support, and it was reported that as social support increased, therapeutic cooperation became stronger.<sup>29,30</sup>

In our study, we observed that as the number of hospitalizations increased in schizophrenics, perceived friend and special someone support decreased. In addition, it was determined that as the duration of the disease increased, perceived family support decreased, and as the severity of the disease increased, perceived total support decreased. This could be explained by the decrease in socialization due to the excess time spent in the hospital and the decrease in the tolerance of families due to the increase in the burden of care as the duration of illness increases. In a recent study investigating the relationship between perceived social

support and recovery in schizophrenics showed that all dimensions of perceived social support had a significant relationship with recovery.<sup>31</sup> The increase in hospitalizations and poor clinical course in patients with psychotic disorders may weaken or even break the social ties that patients establish with friends and special people. Although a different scale was used in our study, our result was similar to the literature. Perceived family support was higher in patients with schizophrenia who had a high insight. In a study evaluating the relationship between social support and insight in schizophrenia, it was reported that perceived social support was associated with insight graded by both the clinician and the patient. In addition, same data reported that patients with high insight have higher perceived social support, and they can seek help from other people more easily to manage their illness and life.<sup>32</sup> Especially in patients diagnosed with psychotic disorder, lack of insight results in difficulties in adherence to treatment, an increase in hospitalization rates, and a negative clinical course, which can lead to weakening or even breaking the social ties that patients establish with friends and a special person.<sup>9</sup> Another finding of our study is that perceived family support and total support are higher in schizophrenics with high adherence to treatment. Also one study evaluating adherence to antipsychotics reported that perceived family support caused a positive approach toward the drug and positively affected the treatment.<sup>33</sup>

In bipolar and schizophrenic patients, there was a significant positive correlation between years of education and perceived friend and special someone support. This could be explained by the fact that the individual can contribute to their social network by making different friendships during the education process, and to social support in terms of turning these friendships into permanent friendships.

When the sample is evaluated in terms of factors that predict social support; gender, years of education, insight, and treatment compliance were found to be predictors. In a cross-sectional study evaluating the relationship between perceived social support and quality of life in psychiatric patients with demographic and clinical variables, it was reported that age, education level, employment status, duration of illness, initiation of treatment, and hospitalization status significantly affect the level of social support.<sup>34</sup> In

another study, it was shown that poor social support is associated with multiple hospitalizations in patients with schizophrenia and bipolar disorder<sup>35</sup> and our study results are consistent with the literature. However, longitudinal studies on this subject are needed.

Our study has some limitations. The healthy control group was not included for comparison. Second, details on residual symptoms and drug use were not included.

### Conclusion

In this study, the relationship between perceived social support, insight levels, and treatment adherence of schizophrenic and bipolar patients in remission who received inpatient treatment in the psychiatry clinic in the last 1 year was evaluated. In our study, the perceived family, friend, and personal support and total support were found to be significantly higher in bipolar patients, and the family perceived the highest support, followed by friends and important people. In addition, education years, insight, and treatment adherence were found to be predictors of perceived social support. The negative impact on the clinical course of the decrease in social support combined with the decrease in perceived social support due to the chronic course of mental illnesses seems to represent a vicious circle. For this reason, informing caregivers (family, spouse, etc.) about the effect of perceived social support on the clinical course and receiving psychoeducation about coping with symptoms may contribute to reducing the burden of caregivers and increasing social support.

### Conflict of Interest

The authors declare that there is not any conflict of interest regarding the publication of this manuscript.

### Ethics Committee Permission

The study was approved by Kırıkkale University Non-Interventional Studies Ethics Committee (date 16.09.2021 and number 2021.09.09)

### Authors' Contributions

Concept/Design: HK, ŞVB. Data Collection and/or Processing: HK, KA. Data analysis and interpretation: ET,

KA. Literature Search: HK, KA. Drafting manuscript: HK, ŞVB. Critical revision of manuscript: HK, ET, ŞVB. Supervision: ŞVB, ET, KA.

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