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Investigation of the effect of criminal involvement history on self-stigma of seeking psychological help and psychological well-being in patients with bipolar disorder

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Abstract

The aim of this study is to examine the relationship between self-stigma of seeking psychological help and psychological well-being and criminal involvement history in patients diagnosed with bipolar disorder (BD). This cross-sectional study was conducted at Elazığ Fethi Sekin City Hospital with patients diagnosed with BD type I (BD-I) who agreed to participate in the study. Group 1 includes patients with and group 2 includes patients without a history of involvement in crime. Along with sociodemographic and clinical data, Self-Stigma of Seeking Psychological Help Scale (SSPHS), Psychological Well-Being Scale (PWBS), Young Mania Rating Scale (YMRS), and Beck Depression Inventory (BDI) were administered to all patients. While PWBS ($p=0.021$) score was lower in group 1 than in group 2, SSPHS ($p=0.005$) and BDI ($p=0.015$) scores were higher. There were 41 crimes belonging to 37 patients. Of these crimes ($n=41$), 12 were wounding, 8 were intentional killing, 7 were threatening, 5 were damaging public property, 3 were theft, 3 were insulting, 2 were sexual harassment, and 1 was intentional killing of a child. In total ($n=71$), a significant correlation was found between the total number of psychiatric hospitalizations and SSPHS ($r=0.503$; $p<0.001$) and PWBS ($r=-0.520$; $p<0.001$) scores; also a significant correlation between SSPHS and PWBS ($r=-0.443$; $p<0.001$). This study reveals that a history of criminal involvement is associated with increased self-stigma in seeking psychological help and decreased psychological well-being in BD-I. The low rate of medication use by patients during criminal behavior may emphasize the importance of compliance with medical treatment.

Keywords: Bipolar disorder, crime, psychological well-being, self-stigma

Introduction

The relationship between bipolar disorder (BD) and criminal behaviors has been studied for many years [1]. The clinical manifestations of BD are diverse, making it a complex disorder. When all BD spectrum subtypes are taken into account, the lifetime prevalence of BD may approach 6.5%, with the BD type I (BD-I) having a prevalence of about 1%. The World Health Organization has identified BD as the seventh most prevalent cause of disability-adjusted life years, making it a serious public health issue [2,3]. Criminal behavior is usually associated with the manic episode of BD-I, which is characterized by exalted mood and elevated affect. Grandiose beliefs and feelings of omnipotence are frequently linked to these episodes, which may result in violations of public order or run-ins with the law. On the other hand, patients diagnosed with BD (P-BD), whose associations

are distorted and who have delusions and hallucinations, can conflict with everyone around them, especially their family members. Due to the potential for hyper sexuality, excessive familiarity, or exhibitionism resulting from the behavioral and sexual disinhibition of P-BD, manic episodes may also provide a danger of legal complications [4,5]. Criminal events may also be encountered during the depressive episode of BD. Homicidal behaviors may be expected to occur when depressive episodes are accompanied by psychotic symptoms [6]. As a result of these problems, the probability of forensic psychiatry units encountering P-BD who are involved in crime increases. In the study by Daff and Thomas [5], P-BD were found to be significantly more likely to be convicted, accused, and found guilty of violent, nonviolent, and moderate-level crimes compared to the general population. In the study conducted by Quanbeck et al. [7], it was reported that

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75% of the prisoners diagnosed with BD were involved in crime during the manic episode. Compared to the general population, P-BD are more likely to commit violent crimes, and substance use disorder comorbidity raises this risk, according to Fovet et al. [3].

P-BD with and without a history of criminal involvement differ from each other in terms of various characteristics. Whether involved in a crime or not, BD is a mental disorder in which stigmatization is common [8]. Particularly, P-BD who are stigmatized with negative stereotypes by society and sometimes by their families, their social relationships and living conditions deteriorate, their income decreases, and indirectly, their compliance with treatment deteriorates, and their BD symptoms increase and become more severe. P-BD also tend to confirm stereotypes about themselves, to be prejudiced against themselves, and to stigmatize themselves [9,10]. P-BD who internalize negative stereotypes and stigmatize themselves may subsequently exhibit negative emotional reactions. Psychiatric symptoms such as depression, anxiety, and obsession are more common in those who tend to stigmatize themselves, and this situation harms psychological well-being (PW) [11,12].

The judicial processes of P-BD who are involved in crimes are carried out through High Security Forensic Psychiatry Units (HSFPU). In Türkiye, hospitalizations are carried out in HSFPUs within the scope of Article 57 of the Turkish Penal Code (TPC 57) regarding security measures specific to mental disorders or Article 74 of the Code of Criminal Procedure (CCP 74) regarding observation [13].

No studies comparing the self-stigma of seeking psychological help (SPH) and PW of P-BD-I with and without a history of criminal involvement could be found in the literature. Our aim in this study was to evaluate and compare the SPH and the PW of BD-I patients with and without a history of involvement in crime through HSFPUs and psychiatry outpatient clinics and to reveal the associated factors. Our hypothesis is that a history of involvement in criminal act is associated with SPH and PW on the BD-I.

Material and Methods

This cross-sectional study was conducted at Elazığ Fethi Sekin Hospital between October 25, 2024 and December 25, 2024 using the convenience sampling method. Ethics committee approval and informed consent were obtained (Decision number: 2024/2-01; Decision date: 24/10/2024).

Study Sample and General Information

Male P-BD-I with a criminal history (group 1) were contacted through the HSFPU of the hospital, while male P-BD-I without a criminal history (group 2) were contacted through the outpatient psychiatry clinic of the hospital. All male P-BD-I subjects hospitalized at HSFPU between the specified dates and meeting the inclusion and exclusion criteria were included in the study (have criminal history). Again, all age- and gender-matched consecutive male P-BD-I subjects who admitted to the outpatient psychiatry clinic of the same hospital between the specified dates

were included in the study (not have criminal history). BD-I was diagnosed according to DSM-5-TR [14].

Remission status of BD-I was defined as the absence or minimal symptoms of both mania and depression for at least 1 week according to clinician judgment [15].

Involvement in a crime meant being convicted of any crime. Being convicted is a situation that occurs when the sentence given as a result of a criminal trial becomes final.

Inclusion and Exclusion Criteria

Cognitive functions may be affected during episodes of mania and depression [16]. The psychometric scales administered in this study are affected by the cognitive status of the patients. Therefore, patients with BD-I who were not in remission were not included in the study. Patients who were involved in a crime and were admitted to HSFPU due to legal processes were included in the study in the pre-discharge process, in remission. Five patients with current psychiatric disorders other than BD-I were not included in the study (substance use disorder (n=4), alcohol use disorder (n=1)).

Neuropsychiatric disorders such as Alzheimer's disease, Parkinson's disease, epilepsy, and multiple sclerosis may result in impaired cognitive functions [17]. Therefore, neuropsychiatric diseases and conditions were accepted as an exclusion criterion, but no patients met these criteria. Lack of control of medical conditions such as diabetes mellitus, essential hypertension, and hypothyroidism have been reported to be associated with cognitive decline [18]. However, such controlled medical conditions were not considered as exclusion criteria because their effect on cognitive functions was limited and no patients were excluded according to this criterion.

Measurements

Sociodemographic and Clinical Data Form

This form included queries such as gender, age, education level, marriage and employment status. In addition, characteristics related to the BD-I diagnosis were questioned.

Self-Stigma of Seeking Psychological Help Scale (SSPHS)

SSPHS is a 10-item self-report scale with a single dimension and a five-point Likert type (1=Totally Disagree, 2=Partially Disagree, 3=Agree and Disagree Equally, 4=Partially Agree, 5=Totally Agree) developed by Vogel et al. [19]. The Turkish validity and reliability study of the scale was conducted by Acun-Kapkıran and Kapkıran [20]. Some items of the scale are reverse scored (items 2, 4, 5, 7), and a high score indicates high self-stigma in seeking psychological help.

Psychological Well-Being Scale (PWBS)

PWBS is a self-report scale consisting of eight items developed by Diener et al. [21]. PWBS addresses important concepts such as establishing positive relationships, feeling of competence, and living a meaningful and purposeful life. It is a five-point Likert-

type scale (1=Strongly Disagree; 2=Disagree; 3=Undecided; 4=Agree; 5=Strongly Agree). All eight items in the scale are positive sentences. The Turkish validity and reliability study of the scale was conducted by Telef [22]. According to this scale, a high score indicates high psychological well-being.

Young Mania Rating Scale (YMRS)

YMRS is a clinician-administered scale consisting of 11 items developed by Young et al. [23] and is based on the patient's subjective report of his or her clinical condition over the previous 48 hours. Additional information is based upon clinical observations made during the course of the clinical interview. The items are selected based upon published descriptions of the core symptoms of mania and a higher score is associated with an increased level of mania. There are four items that are graded on a 0 to 8 scale (irritability, speech, thought content, and disruptive/aggressive behavior), while the remaining seven items are graded on a 0 to 4 scale. These four items are given twice the weight of the others to compensate for poor cooperation from severely ill patients. The validity and reliability of the Turkish form was made by Karadağ et al. [24].

Beck Depression Inventory (BDI)

BDI is a self-report scale consisting of 21 items developed by Beck et al. [25]. Each item consists of 4 options scored between 0 and 3 and reflects the individual's situation in the last week. A score of 17 and above indicates the presence of depression in individuals. The validity and reliability study of the scale was carried out by Hisli [26].

Statistical Analysis

Windows SPSS 26.0 (Statistical Package for the Social Sciences Inc.) was used for the statistical analysis. Continuous variables and descriptive statistics are presented as mean $\pm$ standard deviation, while categorical variables are presented as frequency and percentage. The categorical data were analyzed using the chi-square test. If the expected frequency of one or more cells was less than five and this rate was above 25%, the Fisher Exact test was used instead of the Chi-square test. Compliance with normal distribution was determined by the Kolmogorov-Smirnov test. Mann-Whitney U test was used for variables that did not show normal distribution. Pearson correlation analysis was used. For this purpose, partial correlation was used, which is a measure of the strength and direction of a linear relationship between two continuous variables whilst controlling for the effect of one or more other continuous variables (also known as 'control' or 'covariates' variables). Binary logistic regression analysis was used in group prediction. A value less than 0.05 was considered statistically significant.

When calculating the sample size, since there was no previous study with similar characteristics, the data obtained from the pilot administration conducted on ten participants in each group were used and it was seen that there should be at least 16 cases in each group (SSPHS score of group 1=31.89 $\pm$ 5.22; SSPHS score

of group 2=36.99 $\pm$ 4.08; α =0.05; β =0.20; power=0.80). After including 37 cases in Group 1 and 34 cases in Group 2, the obtained data were subjected to power analysis again and the adequacy of the sample size was confirmed (SSPHS score of group 1=31.08 $\pm$ 5.75; SSPHS score of group 2=37.14 $\pm$ 4.13; α =0.05; β =0.20; power=0.80).

Results

There were 37 males in group 1 and 34 males in group 2. No significant difference was found between the groups in terms of mean age (p =0.699), marital status (p =0.603), education level (p =0.471), working status (p =0.441), region of residence (p =0.735), lifestyle (p =0.712), 2022 disability pension status (p =0.132), age at BD diagnosis (p =0.170), and smoking status (p =0.804). There were no patients with additional medical diseases (Table 1).

While the total number of hospitalizations in any HSFPU in group 1 was 1.45 $\pm$ 0.83, there was no criminal history or hospitalization history in group 2. In group 1, there were seven patients who used oral psychotropic medications and seven patients who used mood stabilizers at the time of the crime, and there were no patients who used long-acting antipsychotic injections (eight different patients). There were 11 patients in group 1 with a history of hospitalization in the HSFPU.

In group 1, 10 patients (27.02%) were hospitalized in HSFPU under CCP 74, and 27 patients (72.98%) under TPC 57. Patients involved in crime (n =37) had at least one crime. There were three patients (8.10%) with a second crime, and one patient (2.70%) with a third crime. In total, there were 41 crimes belonging to 37 patients. Of these crimes (n =41), 12 were wounding, 8 were intentional killing, 7 were threatening, 5 were damaging public property, 3 were theft, 3 were insulting, 2 were sexual harassment, and 1 was intentional killing of a child. The crime/crimes related to the current hospitalization were/were committed 4.86 $\pm$ 3.97 years ago. Alcohol use disorder history (p =0.021) was significantly higher in those with a prison history.

Crime-related characteristics of group 1 are shown in Table 2.

In total (n =71), in the correlation analysis performed controlling for the effect of age and education level, a significant correlation was found between the total number of psychiatric hospitalizations and SSPHS (r =0.524; p <0.001) and PWBS (r =0.519; p <0.001) scores.

In the correlation analysis performed in group 1 (n =37), controlling for the effect of age, a significant correlation was found between the total number of psychiatric hospitalizations and the SSPHS (r =0.501; p =0.002) and PWBS (r =0.520; p =0.001) scores.

In the correlation analysis performed by controlling the effect of age, in total (n =71), a significant correlation was found between BDI and PWBS (r =0.438; p <0.001).

In the correlation analysis performed by controlling the effect of age, in total (n=71), a significant correlation was found between SSPHS and PWBS ($r=-0.443$; $p<0.001$).

The correlation analysis findings are shown in Table 3.

Binary logistic regression analysis was applied to reveal the relationship between the parameters found to be significant and the groups. The significant variables were examined one by one using binary logistic regression analysis. After various modelling, a model was created using SSPHS, PWBS, and BDI. According to the binary logistic regression analysis, the sensitivity of these parameters related to the determining the participants who was involved in a criminal act was 75.7 percent and the specificity was 85.3 percent (Beginning block, -2 log-likelihood=98.300a, overall $p<0.001$; Block one, -2 log-likelihood= 57.323a, Cox & Snell $R^2=0.439$; Nagelkerke R^2 0.585; Hosmer and Lemeshow Test $p=0.682$, Constant $p=0.001$).

Table 1. Comparison of sociodemographic and clinical characteristics of participants

Variables	Group 1 (n=37) mean±SD (mean rank/median) & n	Group 2 (n=34) mean±SD (mean rank/median) & n	p
Age (years)	36.43±6.95 (35.09/38.00)	37.38±8.67 (36.99/38.00)	0.699 ^a
Education level (years)	8.64±3.80 (34.34/8.00)	9.17±3.16 (37.81/8.00)	0.471 ^a
Marital status (married/single/ widow-divorced)	9/25/3	10/23/1	0.603 ^c
Working status (regular working/no working/irregular working)	5/25/7	6/18/10	0.441 ^b
Residence (urban/rural)	27/10	26/8	0.735 ^b
Lifestyle (spouse-children/parents/alone)	9/24/4	10/22/2	0.712 ^c
2022 disability pension status (yes/no)	12/25	17/17	0.132 ^b
Smoking status (yes/no)	24/13	23/11	0.804 ^b
AUD history (yes/no)	8/29	2/32	0.057 ^b
SUD history (yes/no)	9/28	2/32	0.032 ^{*b}
ECT history (yes/no)	9/28	6/28	0.491 ^b
Age at diagnosis of BD (years)	24.40±4.54 (39.22/24.00)	23.02±3.07 (32.50/22.50)	0.170 ^a
Total number of psychiatric hospitalizations in HSFPU and outside HSFPU	3.16±2.24 (36.09/3.00)	2.88±1.77 (35.90/3.00)	0.967 ^a
SSPHS	31.08±5.75 (41.99/30.00)	37.14±4.13 (21.49/38.00)	0.005 ^{*a}
PWBS	26.54±5.39 (31.28/26.00)	33.82±2.65 (41.13/34.00)	0.021 ^{*a}
YMRS	8.97±3.28 (37.61/8.00)	8.11±2.14 (34.25/8.00)	0.203 ^a
BDI	5.24±2.84 (40.11/5.00)	3.67±1.70 (31.53/3.50)	0.015 ^{*a}

* $p<0.05$; Statistical analysis was performed using Mann-Whitney U test^a, Chi-square analysis^b, and Fisher’s Exact test^c; Group 1 included patients with BD who were involved in a crime, and group 2 included patients with BD who were not involved in a crime; SD: standard deviation, AUD: alcohol use disorder, SUD: substance use disorder, ECT: electroconvulsive therapy, BD: bipolar disorder, HSFPU: high security forensic psychiatry unit, SSPHS: self-stigma of seeking psychological help scale, PWBS: psychological well-being scale, YMRS: Young Mania Rating Scale, BDI: Beck Depression Inventory

Table 2. Crime-related characteristics of patients diagnosed with bipolar disorder involved in crime

Variables	n (%)
Crime 1	Wounding
	11 (26.88)
	Intentional killing
	8 (19.51)
	Threatening
	7 (17.07)
	Damaging public property
Crime 2	5 (12.19)
	Theft
	3 (7.31)
	Sexual harassment
Crime 3	2 (4.87)
	Intentional killing of a child
Prison history	1 (2.43)
	Insulting
Prison history	3 (7.31)
	Wounding
Prison history	1 (2.43)
	19 (51.35)

Note: Since the total number of crimes was 41, it was taken into account in the crime-related percentages; Since the number of patients in group 1 was 37, this number was taken into account in the prison history percentage

Table 3. Correlation analysis of the participants

		Total number of psychiatric hospitalizations		SSPHS		PWBS		BDI	
		Total (n=71)	Group 1 (n=37)	Total (n=71)	Group 1 (n=37)	Total (n=71)	Group 1 (n=37)	Total (n=71)	Group 1 (n=37)
Total number of psychiatric hospitalizations	r, p	.	.	.	.	.	.	.	.
SSPHS	r, p	-0.502, <0.001**	-0.439, 0.008*	.	.	.	.	.	.
PWBS	r, p	-0.334, 0.005*	-0.372, 0.028*	0.824, <0.001**	0.788, <0.001**	.	.	.	.
BDI	r, p	0.128, 0.295	0.266, 0.123	-0.328, 0.006*	-0.312, 0.068	-0.415, <0.001**	-0.350, 0.040*	.	.

*p<0.05, **p<0.001; Correlation analysis was performed by controlling age and education level; Group 1 included patients with BD who were involved in a crime; SSPHS: self-stigma of seeking psychological help scale, PWBS: psychological well-being scale, BDI: Beck Depression Inventory

Discussion

In this study, SPH and PW of P-BD-I with and without a history of criminal involvement were compared and the effects of various clinical variables on the findings were examined. While stigmatization is one of the core factors predicting functionality in BD [8], PW is also a concept with a clear relationship to functionality [27]. It is known that sociodemographic variables have an impact on functionality in BD [27]. The fact that the groups compared in this study have similar characteristics in terms of relevant variables facilitates the interpretation of data obtained from psychometric scales by reducing limitations.

There are various studies examining crime and related factors in the BD. A population-based study reported the prevalence of criminal act as 0.66% in individuals without any psychiatric disorder [28]. In the same study [28], this rate was found to be 25.34% in P-BD-I. The prevalence of affective disorders among criminal offenders ranges from 1 to 31% [29]. According to the 1990–1992 National Comorbidity Survey of police and court records conducted in the United States, 12.2% of individuals with a BD diagnosis would experience aggressive behavior throughout their lives [30]. The frequency of aggressive behaviors increases in BD-I, and personality problems and substance use increase this rate [3]. Fazel et al. [6] reported a relative risk ratio for violent act in BD relative to the general population of 3.1 in the absence of comorbid illicit drug use, and 19.9 for patients with comorbid illicit drug use. Consistent with this information, this study revealed that alcohol use disorder history was significantly higher in those with a prison history. In this study, it was found that patients with BD-I were more involved in crimes against individuals (87.80%) and less likely to commit crimes against public property (12.20%). According to this study, 26.26% of the patients were found to have committed a wounding as their crime or one of their crimes. When we evaluated killing, crimes against children and sexual crimes as violent crimes, it was

determined that 26.82% of the crimes in this study were violent crimes. Possible causes of crimes committed against individuals in P-BD were examined. The presence of psychotic, manic, and hypomanic symptoms have been reported as the main reasons for involvement in crime in patients with BD [4-6]. It has been shown that the presence of psychotic, manic, and hypomanic symptoms is mostly related to non-compliance with medical treatment and not using psychotropic medications [31]. Consistent with this information, in the present study, only eight of the patients involved in the crime were reported to have received any treatment for their BD diagnosis at the time of the crime. It is also not known whether these treatments have adequate dosage or ingredients. From this perspective, supporting interventions aimed at increasing treatment compliance in patients with BD-I may be effective in reducing crime rates. It is well known that treatment with long-acting antipsychotic injections prevents relapses, reduces the number of rehospitalizations, effectively reduces violent behaviors, and consequently increases treatment compliance [32]. Kishi et al. [33] reported in their meta-analysis of randomized controlled trials that long-acting injectable antipsychotics are effective in preventing relapse. Lähteenvuio et al. [32] demonstrated in a nationwide cohort study in Finland that the risk of rehospitalization during treatment with long-acting antipsychotic injections was 30% lower than with oral antipsychotics. In this study, it was determined that patients with BD-I diagnosis who were involved in crime did not use any long-acting antipsychotic injections during the criminal behavior. It is hypothesized that long-acting antipsychotic injections may reduce the number of criminal events in BD-I by reducing the frequency and severity of manic/hypomanic/mix/psychotic episodes.

Stigmatization of BD is connected with a lack of knowledge about disorder, prejudice, fear, and discrimination of the patients. In addition to decreased functionality, a self-stigmatization process may also occur in patients with a BD

diagnosis who are exposed to stigmatization [10]. All types of stigmatization and related processes may result in aggression in patients with BD [34].

Although self-stigma in BD and involvement in crime in BD have been investigated in separate studies, the relationship between self-stigma and involvement in crime has not been investigated sufficiently. Furthermore, a more specific type of self-stigma, such as SPH, has not yet been investigated in patients with a diagnosis of BD who have engaged in criminal activity. This study found that a history of criminal involvement was associated with increased SPH. Additionally, a significant positive correlation was found between SPH and the total number of psychiatric hospitalizations. It is assumed that as BD patients' compliance with treatment deteriorates, the number of hospitalizations increases, and that patients with increased hospitalizations also have higher levels of self-stigma. According to social reaction theory, stigmatization and self-stigma may occur in individuals labeled with a mental disorder diagnosis [35]. Liu et al. [36] reported that self-stigma increased in patients with severe mental disorders who were hospitalized for long periods, resulting in decreased quality of life. On the other hand, involuntary hospitalizations further increase stigmatization. It is assumed that individuals involved in crime are more likely to have involuntary hospitalizations, including judicial incarcerations, than those not involved in crime. In the study conducted by Rüşçü et al. [37], it was stated that as the number of involuntary hospitalizations increases, self-stigma also increases, which results in a decrease in self-esteem.

According to the BDI, which reports a cut-off point of 17 for the presence of depression, there is no depression in the groups in this study [25,26]. However, it was observed that subthreshold depression symptoms differed between the groups. Subthreshold depression scores were found to be higher in P-BD who were involved in crime. Increasing treatment opportunities in P-BD, whether they have a criminal history or not, is very important due to the above findings. Individuals with high levels of self-stigma in SPH are restricted from accessing treatment. The functionality of patients left untreated may be irreversibly affected [38]. This may result in high subthreshold depression scores. In the study by Martínez-Arán et al. [39] examining patients with BD in the euthymic phase, a close relationship was found between poor treatment compliance and cognitive impairment. The study of Samalin et al. [40] showed that residual depressive symptoms and perceived cognitive performance were the most important features significantly related to psychosocial functioning.

Self-stigma is seen in patients with BD together with decreased self-confidence and self-esteem, loss of positive beliefs about themselves, and poorer insight [10]. These characteristics associated with self-stigma are associated with decreased quality of life and deterioration in PW in patients with BD diagnosis. Although PW has been investigated in BD [27], the effect of criminal history on PW has not yet been sufficiently investigated.

In this study, it was shown that the PW of patients with BD diagnosis who were involved in crime was lower than those who were not involved in crime. A significant negative relationship was determined between SPH and PW. In addition, a significant negative relationship was found between subthreshold depression scores and PW.

This is the first study to examine the SPH and PW of BD patients with and without a history of involvement in crime in the context of clinical variables. This study has several limitations. Its cross-sectional nature does not allow for a strong establishment of cause-and-effect relationships between the findings. It is thought that the factors affecting SPH and PW in BD-I will be revealed more clearly with longitudinal studies. The study findings were created based on questions directly addressed to the patients. Situations may have arisen due to the patients' incorrect or incomplete memories. Their use of alcohol and/or illegal substances at the time of the crime is not known. The treatment characteristics (such as appropriate medication/s, adequate dose) of patients who reported receiving BD treatment at the time of involvement in crime are unknown. It is recommended that the characteristics of the crime be detailed in further studies. The possible effect of personality traits on the findings was not investigated separately. Since there was no female inpatient unit in the hospital where the study was conducted, only males were included in this study. Studies that include female patients also need to be conducted. The outpatient and inpatient clinic where the study was conducted had a high patient turnover, which enabled the required number of samples to be reached in a short time. However, it should not be forgotten that the short time interval may have affected the results.

Conclusion

In conclusion, this study indicates that patients with a diagnosis of BD and a history of involvement in crime are not sufficiently compliant with medical treatment during criminal behavior; that they have higher levels of SPH and lower PW than patients with a diagnosis of BD without a history of involvement in crime; and that there is a negative relationship between SPH and PW. It has been determined that being hospitalized in any psychiatry inpatient unit is also related to SPH and PW. It is thought that clinicians' practices aimed at increasing compliance with medical treatment will increase functionality in patients with a diagnosis of BD who are involved in crime by affecting various factors.

Conflict of Interests

The authors declare that there is no conflict of interest in the study.

Financial Disclosure

The authors declare that they have received no financial support for the study.

Ethical Approval

Approval for this study was obtained from the Republic of Türkiye, Elazığ Governorship Provincial Health Directorate, Elazığ Fethi Sekin City Hospital Non-Interventional Research Ethics Committee with the decision numbered 2024/2-01 dated 24/10/2024.

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