Resilience, depression and burnout levels in caregivers of patients followed in the forensic psychiatry service

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SUMMARY

Objective: It is known that psychiatric diseases also affect the quality of life of patients' relatives. The aim of this study is to examine the level of resilience, depression and burnout of the caregivers of forensic psychiatry patients in order to recognize the mental problems that may be experienced by relatives of forensic psychiatry patients who have committed crimes in addition to psychiatric illness.

Method: 90 high-security forensic psychiatry patient relatives were included in the study. Sociodemographic data form, Beck Depression Inventory (BDI), Adult Resilience Scale (RSA) and Maslach Burnout Inventory (MBI) were administered to all participants.

Results: BDI score of caregivers was 10.8±7.7, RSA-total 99.8±12.5, emotional burnout score from MBI subscales 22.5±3.4, depersonalization score 9.4±2.2, personal success score was determined as 16.8±5.4. There was a significant difference between the duration of caregiving in terms of BDI score ($p<0.01$). The BDI score of the caregivers of the patients with criminal liability was found to be significantly higher than the score of the caregivers of the patients without criminal liability ($p< 0.01$).

Discussion: It was observed that the level of psychological resilience was good in people who took care of psychiatric patients who were subjected to forensic psychiatric examination, but they had mild depression and moderate burnout. It is seen that the relatives of the patients are affected psychologically and the necessary psychosocial support can be positive for the caregivers.

Key Words: Forensic psychiatry, caregiver, resilience, depression, burnout

INTRODUCTION

Violence is characterized as the employment of physical force with the potential to cause bodily injury or even mortality, directed at oneself or others (1). It has been documented that certain psychiatric disorders can precipitate attitudes and actions leading to violent outcomes (2). Empirical research delineates a heightened propensity for violent and criminal behaviour among individuals suffering from psychiatric disorders compared to the broader populace (3, 4). To attenuate the recurrence of criminal activities and facilitate the reintegration of forensic psychiatric patients into society, specialized forensic psychiatric services have been instituted, focusing on the appropriate treatment and rehabilitation of these individuals (5). These services supervise patients whose criminal liabilities have been influenced by afflictions such as bipolar disorder and schizophrenia, encompassing crimes from minor assaults to homicides (6).

The nomenclature "caregiver" denotes individuals, frequently close kin, aiding patients with psychiatric disorders in varied facets including personal care, transportation, and fiscal management (7). The chronic nature of mental illnesses often necessitates sustained care, leading a considerable portion of patients to reside with their families (8). Predominantly, these patients spend their entire

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day in the household setting, engendering physical, psychological, social, and economic hardships for family members involved (9,10). Several determinants, such as the progression of the psychiatric ailment, the periodicity of episodes, and the societal stigma bestowed upon these individuals, intensify the adversities encountered by caregivers, frequently culminating in diminished life quality and augmented perceived familial burden (11,12).

Psychological resilience refers to an individual's adaptive process and capacity to overcome successfully substantial stress sources such as threats, familial issues, or trauma (13,14). Individuals with high levels of psychological resilience may possess the advantage of harnessing strength in stressful situations (15). Conversely, it has been demonstrated that individuals with lower psychological resilience are prone to depression (16,17). This vulnerability is associated with a diminished resistance to stress during adolescence, increasing the lifetime risk of utilizing antidepressant and anxiolytic medications (18). It is acknowledged that caregivers of individuals with disabilities often report high scores on depression scales (19).

Depression is conjectured to be linked with burnout syndrome as defined by Maslach, a state characterized by chronic fatigue leading to adversities in individual functionality, accompanied by the progression of despondency, helplessness, and a state of emotional, physical, and intellectual exhaustion (20,21). Furthermore, there exist studies indicating a correlation between the deficiency levels in children with autism and elevated levels of despair, depression, and burnout experienced by their parents (22,23).

We observe that caregivers of individuals undergoing mental treatment encounter various challenges. We hypothesize that the psychological states of these caregivers can differ based on factors such as the characteristics of the psychiatric patients they are tending to, the diagnoses of the illnesses, and the nature of the crimes committed. Therefore, this study aims to identify the levels of psychological resilience, depression, and burnout in individuals providing care to forensic psychiatric patients. We believe that our research can serve as a guide to better understanding the mental states of caregivers and enhancing the quality of psychosocial support that can be extended to them.

METHOD

Study design and sample collection

Local ethical committee approval was obtained from Firat University Faculty of Medicine on 24.02.2022 date. This study was conducted in accordance with the ethical standards stipulated in the 1983 revision of the Helsinki Declaration. The participants included in the study were 118 caregivers (one relative per patient) of patients who were being treated at the Fethi Sekin City Hospital High Security Forensic Psychiatry Clinic for committing criminal offenses. Following the acquisition of written voluntary consent forms from all participants, structured interviews based on DSM-5 were conducted in the interview room by a psychiatric physician, and accompanying psychiatric diagnoses were determined according to the Structured Clinical Interview for DSM-5 Disorders - Clinician Version (SCID-5-CV). However, 10 individuals opted to withdraw from the study, and 8 individuals were excluded due to incomplete form submissions. All participants were administered a sociodemographic data form prepared by us, along with the Beck Depression Inventory, Psychological Resilience Scale, and Maslach Burnout Inventory. In selecting the sample group, it was required that the individuals be primary relatives of patients who had committed a criminal offense, who were visiting the patients or inquiring about them during calling hours, aged between 18 and 65, affirming that the individual they are caring for is undergoing treatment in the forensic psychiatry service, and not having any psychiatric or neurological diseases themselves, not being mentally retarded, and being literate. Furthermore, our study assessed the crimes committed by the patients who had committed a criminal offense under the scope of the Turkish penal code Article 32 (TCK 32) regarding criminal responsibility. It is required for an individual to have full criminal responsibility, to have the ability to direct their actions, and to be able to perceive the legal meanings and consequences of the crime they committed.

This law's first clause stipulates that decisions are made to apply security measures without penal liability for individuals who cannot perceive the legal meaning and consequences of the act committed due to mental illness, and whose ability to control their actions related to this act is diminished. The second clause states that, in cases where not entirely but significantly eliminating consciousness and freedom of action due to mental illness or weakness, a reduction in the penalty is applied (24).

Measurement Tools

Sociodemographic Data Form: This is a form containing clinical evaluation questions such as age, marital status, educational status, and the nature of the caregiver's relationship with the patient, designed by the researchers in line with the objectives of the study.

Beck Depression Inventory (BDI): It was developed to measure the level of depression in adults (25). Scores between 0-9 indicate minimal depression, 10-16 mild depression, 17-29 moderate depression, and 30-63 severe depression. A Turkish validity and reliability study has been conducted (26).

Psychological Resilience Scale for Adults (PRSA): Developed by Friborg et al., it encompasses subdimensions including 'self-perception' and 'future perception,' 'structural style,' 'social competence,' 'family cohesion,' and 'social resources.' Turkish validity and reliability studies were conducted by Basım and Çetin (27, 28). During the calculation, since it was desired to increase resilience as the scale scores increased, the answer boxes were evaluated from left to right as 12345, and the questions numbered 1–3–4– 8–11–12–13–14–15–16–23–24–25–27–31–33 on the scale were marked as reverse questions (28).

Maslach Burnout Inventory (MBI): It includes subscales of emotional exhaustion, personal accomplishment, and depersonalization. High scores in the desensitization and emotional exhaustion subscales and low scores in the personal achievement sub-scale are accepted as signs of burnout. Contrarily, receiving high scores in desensitization and emotional exhaustion sub-scales and low scores in personal achievement sub-scale indicates a high level of burnout, while low scores in desensitization and emotional exhaustion sub-scales and high scores in personal achievement sub-scale demonstrate a low level of burnout. The average scores taken from all three sub-scales point to a medium level of burnout. In the scoring key of the scale, the highest score that can be obtained from the emotional exhaustion dimension is 54, from the personal accomplishment dimension is 48, and from the desensitization dimension is 30. The Turkish validity and reliability study was conducted by Ergin (29, 30).

Statistical Analysis

Analyses were conducted using the SPSS (Statistical Package for Social Sciences; SPSS Inc., Chicago, IL) software package version 22. In the study, descriptive data were presented as n and % values for categorical data, and as mean ± standard deviation (Mean±SD) for continuous data. The normality of the continuous variables was tested with the Kolmogorov-Smirnov test. For the comparison of two groups, the student's t-test was applied for variables showing normal distribution, whereas the Mann-Whitney U test was utilized for variables not adhering to a normal distribution. When comparing more than two variables, One-Way ANOVA analysis was used for those meeting the normal distribution criteria, while the Kruskal-Wallis's test was performed for non-normally distributed variables. To investigate the relationships between continuous variables, Pearson correlation was utilized for normally distributed data, and Spearman correlation was employed for non-normally distributed data. A statistical significance level was accepted as $p<0.05$ in the analyses.

RESULTS

Ninety caregivers with an average age of 37.3±10.7 (min=19-max=65) were included in the study. Of the caregivers, 14.4% have been providing care for less than a year, 31.1% for 1-5 years, 12.2% for 5-10 years, and 42.2% for more than 10 years. 45.6% of the caregivers were the parents, 26.7% were the spouse, 7.8% were siblings, and 20% were other individuals of the patients (Table 1).

Table 1. Characteristics of Caregivers

		N	%
Age (Mean – SD)		37,3–10,7	
Marital Status	Single	62	68,9
	Married	28	31,1
Educational Status	Preliminary school and below	61	67,8
	High school and above	29	32,2
Residential Status	County	42	46,7
	City	48	53,3
Income	Low	54	60,0
	Average	27	30,0
	High	9	10,0
Occupational Status	Employee	44	48,9
	Unemployed	46	51,1
Comorbid Organic Disease	Yes	11	12,2
	No	79	87,8
Use of Psychiatric Medication	Yes	62	68,9
	No	28	31,1
Psychiatric Treatment History of Caregiver	Yes	76	84,4
	No	14	15,6
Duration of Caregiving	Less than 1 year	13	14,4
	1-5 years	28	31,1
	5-10 years	11	12,2
	More than 10 years	38	42,2
The Caregiver s Level of Relationship	Parents	41	45,6
	Spouse	24	26,7
	Siblings	7	7,8
	Other	18	20,0

25.6% of the patients had bipolar disorder, 23.3% had schizophrenia, 11.1% had otherwise unspecified mood disorders, 23.3% had other unspecified psychosis, and 16.7% were diagnosed with mental retardation. 34.4% of the patients were in HSFP for observation/review reasons while 65.6% were there for protective treatment; of those there for observation/review, 80.6% were found to be fully criminally responsible. 24.4% of the patients were involved due to simple assault, 14.4% due to murder, 7.8% due to sexual assault, 5.6% due to insult, 27.8% due to other reasons, and 20% due to multiple reasons (Table 2).

The caregivers had BDI scores of 10.8±7.7, PRSA total scores of 99.8±12.5, and MBI sub-scores of

Table 2. All Characteristics of Patients

		N	%
Psychiatric Diagnosis	Bipolar Disorder	23	25,6
	Schizophrenia	21	23,3
	NOS Mood Disorder	10	11,1
	NOS Psychosis	21	23,3
	MR	15	16,7
Duration of Psychiatric Disorder	<5 years	22	24,4
	5-10 years	15	16,7
	>10 years	53	58,9
The Reason of HSFP Hospitalization	Observation	31	34,4
	Preservation treatment	59	65,6
Criminal Capacity	Yes	25	80,6
	No	6	19,4
Crime	Simple Assault	22	24,4
	Murder	13	14,4
	Sexual Assault	7	7,8
	Insult	5	5,6
	Other	25	27,8
	Multiple Reasons	18	20,0
Treatment Number in HSFP	1	70	77,8
	2	12	13,3
	3	8	8,9
Non-HSFP Inpatient Treatment	Yes	61	67,8
	No	29	32,2

NOS: Non otherwise specified, HSFP: High security forensic psychiatry

Table 3. The Scale Scores of the Caregivers

	Mean – SD
BDI	10,8–7,7
PRSA-Total	99,8–12,5
MBI-Emotional Exhaustion	22,5–3,4
MBI-Desensitization	9,4–2,2
MBI-Personal Achievement	16,8–5,4

BDI: Beck Depression Inventory, PRSA: Psychological Resilience Scale for Adults, MBI: Maslach Burnout Inventory

emotional exhaustion at 22.5±3.4, depersonalization at 9.4±2.2, and personal accomplishment at 16.8±5.4 (Table 3). There was a significant difference in BDI scores based on the duration of caregiving (p=0.01), which was derived from the difference between those who have been providing care for less than a year and those for over 10 years. A significant difference was observed in BDI scores based on the psychiatric diagnosis of the patient (p<0.001), which was derived from the difference between caregivers of patients with mental retardation and caregivers of patients with other diagnoses. The BDI score of caregivers of patients who were criminally responsible was significantly higher than those of caregivers of patients who were not criminally responsible (p=0.001). Caregivers of those who were in HSFP for observation/review had significantly higher PRSA scores than those of caregivers of individuals who were there for protective treatment (p=0.034) (Table 4).

Table 4. Comparison of BDI and PRSA with Variables

		BDI*	PRSA**
		Mean – SD	Mean – SD
Psychiatric Treatment History of Caregiver	Yes	10,4–7,0	99,6–12,1
	No	12,9–10,5	101,0–14,8
p		0,627	0,708
Duration of Caregiving	Less than 1 year	6,8–6,3[a]	105,2–14,1
	1-5 years	10,4–8,4[a,b]	99,4–11,8
	5-10 years	7,7–4,4[a,b]	101,5–13,2
	More than 10 years	13,3–7,6[b]	97,8–12,1
p		**0,01**	0,316
The Caregiver s Level of Relationship	Parent	11,0–8,0	97,2–13,2
	Sibling	6,1–4,6	99,3–10,3
	Other	12,3–9,1	103,3–9,3
	Spouse	10,4–6,4	101,9–13,5
p		0,330	0,288
Psychiatric Diagnosis	Bipolar Disorder	9,3–6,0[a]	99,5–14,3
	Schizophrenia	8,3–4,4[a]	97,2–10,5
	NOS Mood Disorder	6,3–5,1[a]	107,7–11,8
	NOS Psychosis	9,0–5,9[a]	99,8–12,6
	MR	22,0–7,4[b]	99,0–11,8
p		**<0,001**	0,290
Duration of Psychiatric Disorder	<5 years	8,2–6,6	103,3–14,6
	5-10 years	8,6–4,3	99,7–10,5
	>10 years	12,4–8,4	98,5–12,0
p		0,056	0,317
The Reason of HSFP Hospitalization	Observation	10,4–7,8	103,7–14,3
	Protection Treatment	10,9–7,6	97,8–11,0
p		0,772	**0,034**
Criminal Capability	Yes	12,0–7,7	102,2–13,6
	No	3,5–3,8	109,8–16,7
p		**0,001**	0,247
Crime	Simple assault	10,1–7,7	102,2–12,8
	Insult	8,4–5,9	99,4–11,1
	Sexual assault	17,7–12,2	95,4–12,2
	Murder	11,4–7,2	93,6–8,9
	Other	10,0–7,2	102,4–12,1
	Multiple reason	10,1–6,4	99,8–14,7
p		0,607	0,315
Treatment Number of HSFP	1	10,8–8,3	100,1–12,6
	2	11,3–5,7	97,1–13,7
	3 and more	9,6–3,7	102,1–10,1
p		0,739	0,651

*Mann Whitney U or Kruskal Wallis, **Student s T or ANOVA, a,b: source group of difference

A significant difference was observed between the type of crime committed by forensic patients and the emotional exhaustion scores, a sub-scale of MBI, of their caregivers ($p<0.001$). This discrepancy stemmed from the difference between the scores of caregivers of patients who committed sexual offenses and those of caregivers of patients who committed simple assault, other, and multiple crimes. Similarly, a significant variation was found in the depersonalization scores of caregivers in terms of the patient's crime ($p=0.01$). This distinction originated from the difference in scores between the caregivers of individuals who committed only sexual offenses and those of caregivers for individuals with other offenses. A notable difference was identified between the number of treatments the patient received in HSFP and the personal accomplishment scores of the caregivers ($p=0.022$). This variation derived from the difference between caregivers of patients who stayed three or more times in HSFP and those who had 1 to 2 stays (Table 5).

Table 5. Comparison of The Subscales of MBI with Variables

		EE*	D*	PA**
		Mean – SS	Mean –SD	Mean – SD
Psychiatric Treatment History of Caregiver	Yes	22,1–3,1	9,4–2,2	16,6–5,2
	No	24,2–4,5	9,6–2,1	17,7–6,3
p			0,986	0,496
Duration of Caregiving	Less than 1 year	21,8–2,2	8,6–1,9	19,7–3,4
	1-5 years	23,1–3,7	9,8–2,1	16,2–6,0
	5-10 years	21,6–2,5	9,2–2,3	15,4–5,9
	More than 10 years	22,4–3,7	9,5–2,2	16,7–5,1
p			0,259	0,179
The Caregiver s Level of Relationship	Parent	23,0–4,0	9,3–2,4	17,0–5,8
	Sibling	21,0–1,9	8,6–,5	17,9–6,6
	Other	23,6–3,0	9,7–2,0	16,9–6,2
	Spouse	21,1–2,2	9,8–2,1	16,0–3,4
p		0,051	0,172	0,846
Psychiatric Diagnosis	Bipolar Disorder	22,9–3,0	9,4–2,6	16,7–6,4
	Schizophrenia	22,1–2,8	9,2–2,2	17,1–4,8
	NOS Mood Disorder	22,3–3,0	9,6–1,9	15,4–4,8
	NOS Psychosis	21,3–3,4	10,1–1,5	16,3–4,8
	MR	24,0–4,5	8,7–2,3	18,3–5,9
p			0,331	0,737
Duration of Psychiatric Disorder	<5 years	22,5–3,5	9,8–1,5	16,4–5,0
	5-10 years	21,9–2,9	8,9–2,9	16,3–5,6
	>10 years	22,6–3,5	9,4–2,1	17,1–5,5
p			0,709	0,818
The Reason of HSFP Hospitalization	Observation	21,9–3,8	9,5–1,5	16,6–4,7
	Protection Treatment	22,8–3,1	9,4–2,4	16,9–5,7
p			0,743	0,833
Criminal Capability	Yes	21,9–4,1	9,8–1,4	16,1–5,0
	No	21,8–2,6	8,3–1,5	18,8–2,6
p			0,067	0,247
Crime	Simple assault	21,3–2,5[a]	9,9–1,6[a,b]	15,3–4,8
	Insult	20,8–1,1[a,b]	11,0–1,7[a,b]	14,6–4,1
	Sexual assault	28,7–3,5[b]	11,0–,8[a]	14,3–7,2
	Murder	24,0–3,4[a,b]	9,8–1,6[a,b]	18,1–5,4
	Other	21,2–2,3[a]	8,2–2,5[b]	18,6–4,5
	Multiple reason	22,6–3,0[a]	9,2–2,4[a,b]	16,9–6,3
p			**0,01**	0,186
Treatment Number of HSFP	1	22,6–3,5	9,6–2,0	17,2–5,1[a]
	2	20,8–2,2	8,7–2,3	17,6–5,7[a]
	3 and more	23,4–3,3	9,2–3,3	11,9–4,9[b]
p			0,505	**0,022**

EE: Emotional Exhaustion, D: Desensitization, PA: Personal Achievement *Mann Whitney U or Kruskal Wallis, **Student s T or ANOVA, a,b: source group of difference

Table 6. Correlations Between the Scale Scores

		Age	BDI	PRSA	MBI-EE	MBI-D
BDI	r	,044				
	p	,678				
PRSA	r	-,076	-,145			
	p	,474	,174			
MBI-EE	r	**-,258**	,131	-,154		
	p	**,014**	,219	,149		
MBI-D	r	**-,211**	,034	,062	**,349**	
	p	**,046**	,749	,563	**,001**	
MBI-PA	r	,107	,030	-,008	-,152	**-,418**
	p	,314	,776	,944	,154	**,000**

BDI: Beck Depression Inventory, PRSA: Psychological Resilience Scale for Adults, MBI-EE: Maslach Burnout Inventory-Emotional Exhaustion, -D: Desensitization, -PA: Personal Achievement

A negative correlation was observed between age and the sub-scales of emotional exhaustion and dissociation. A positive significant relationship was noted between the emotional exhaustion and dissociation sub-scales. Furthermore, a negative correlation was identified between the dissociation and personal accomplishment sub-scales (Table 6).

DISCUSSION

This study indicates that caregivers of forensic psychiatric patients have a good level of psychological resilience and mild levels of depression, albeit with moderate signs of burnout.

Some families may fragment in the face of chronic stress or crises, yet it is noteworthy that others overcome such situations with increased strength (31). It is known that individuals with high levels of psychological resilience possess greater abilities to cope with stress (32). Enhancing psychological resilience in caregivers of individuals with mental illnesses facilitates the patient's adaptation to life (33). Yağmur et al. (34) calculated the total score of the Adult Psychological Resilience Scale as 120.53 ± 19.51 in their study on caregivers of 120 patients receiving treatment in the psychiatry department of the Manisa Mental Health and Diseases Hospital. Lök et al. (35) found a PRSA score of 88.15 ± 11.62, similar to our study, when working with caregivers of patients with schizophrenia and argued that psychological resilience can be developed. In contrast, a study on the caregivers of patients diagnosed with bipolar disorder in China found that resilience was lower in the community correlated with factors such as age, occupation, and the duration of caregiving (36). Although this varies according to sociocultural changes, it suggests, as seen in many studies, that individuals caring for psychiatric patients maintain

a good level of psychological resilience. Our findings indicate that psychological resilience increases as the duration of caregiving extends. However, it has been observed that the psychological resilience of relatives of individuals with physical illnesses decreases as the treatment period prolongs (37). This situation might be related to the processes of physical and mental illnesses and their effects on relatives.

It has been determined that our sample group experiences mild symptoms of depression. It is known that caregivers generally exhibit higher levels of depression (38). Research has shown that the prevalence of depression, which affects the mental health status of patients, is higher in families with psychiatric patients compared to the general population (39, 40). In our sample group, it was observed that as the caregiving period extended, depression scores increased. It is also seen that the caregivers of individuals diagnosed with mental retardation who committed crimes have higher levels of depression. This is because mental retardation begins at a younger age and continues into adulthood. It has been found that depression scores increase as the caregiving period for parents with disabled children extends (19). In our study, the BDÖ score of caregivers of patients with criminal responsibility was found to be significantly higher than those caring for individuals without criminal responsibility, which suggests this circumstance might complicate the acceptance of the situation by the relatives of the patient.

Depressive symptoms have been noted to be an indicator of burnout (41). In Iran, burnout symptoms were identified among caregivers of patients with mental disorders (42). Khalili et al. (43), in a study with 120 schizophrenia patient caregivers, found high average scores in emotional exhaustion and depersonalization dimensions of the Maslach Burnout Inventory (MBI). Meanwhile, the personal accomplishment score was found to be low, indicating high levels of burnout syndrome in caregivers of schizophrenia patients. In another study involving 169 psychosis patients, 58% of the sample reported high levels of emotional exhaustion, 31% reported high levels of depersonalization, and 43% reported low levels of personal achievement (44). Similarly, in our study, we found that the caregivers of patients subjected to forensic psychiatric examination experienced burnout, with moderate levels in the MBI emotional exhaustion and depersonalization subscales, and high in personal accomplishment subscale, which aligns with literature findings. Additionally, in our study, a difference was observed between the type of crimes committed by the patients and the burnout subscale scores of the caregivers. Given that sexual crimes can cause more problems morally and socially, it suggests that it might have adversely affected the relatives of the patients to a greater extent.

In our study, 45.6% of the caregivers were the parents, 26.7% were the spouses, 7.8% were siblings, and 20% were other individuals. Often, the primary caregivers for mental health patients are their first-degree relatives, mainly the parents (45). We found a significant negative correlation between the age of the caregiver and the emotional exhaustion and depersonalization subscales. It is known that as the caregivers of patients with chronic diseases age, the symptoms of burnout decrease (46). This suggests that with age, accepting the illness may become easier, and this might act as a protective factor against mental distress.

To the best of our knowledge, the strong aspect of our research is that no similar topic has been studied before in psychiatric patients who have committed crimes. The limitations of our study include the restricted sample group, the fact that we did not evaluate the patients who committed crimes under separate provisions of TCK 32/1 and 32/2, not including the patients' treatment processes and disease severities in the assessment, the cross-sectional nature of the study, and it being centered in a single facility. We believe that our findings could pave the way for multi-centered studies involving a larger sample size.

In conclusion, it is observed that the caregivers of psychiatric patients who have committed crimes may have experienced individual and societal problems beyond the treatment and monitoring of mental illness. Although they have high psychological resilience, their levels of depression and burnout are also high. We believe that the content of psychosocial support to be provided to the relatives of

patients carries specific features for forensic psychiatric patients, and not overlooking this situation will be beneficial for the caregivers.

Conflicts of interest: The authors declare that they have no conflict of interest.

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