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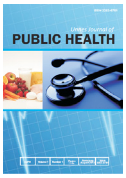

The Relationship Between Burnout and Violence Tendecies of Caregivers of Patients with Schizophrenia

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Abstract

The importance of family has increased with the adoption of the community-based approach in the treatment of patients with schizophrenia and returning them to their social environments. Schizophrenia is a chronic mental illness, that affects not only the individual but also the family's life because 10% of suffered individuals with illness need such long-term care and needed support from their families. This study aims to examine the relationship between burnout and violent tendencies among caregivers of schizophrenia patients. The study was a correlational and cross-sectional survey and followed quantitative methodology. The population consisted of 60 caregivers who took primary responsibility and spent the most time with patients diagnosed with "schizophrenia" according to DSM-V-TR diagnostic criteria, who were registered in a health center. In line with the purpose of the research, data collection tools are the Personal Information Form, Maslach Burnout Scale, and Violence Tendency Scale. The study found that there was a positive significant relationship between burnout and violence tendency among caregivers (r=0.539; p=0.000<0.05). In other words, burnout of caregivers increases violence tendency. In addition, the sub-dimensions of burnout significantly affected the propensity to violence (F=8,657; p=0.000<0.05). The severity of illness in schizophrenia patients impairs their caregivers' mental health. Families caring for persons with schizophrenia have difficulty tolerating them if the families have a feeling of burnout. Dissemination of psychosocial practices among caregivers of schizophrenia patients in adjunct to treatment will help families reduce their level of burnout and depression.

INTRODUCTION

Schizophrenia is a chronic mental disorder that affects not only the individual but also the family's life (Caqueo-Urízar et al., 2017; Shamsaei, Cheraghi & Bashirian, 2015) because 10% of individuals with chronic mental illness need long-term care and most of them live with their families (Fekadu et al., 2019; Ceylan & Çilli, 2015). The importance of family has increased with the adoption of a community-based approach in the treatment of patients with schizophrenia in society and returning them to their social environments. In Iran, 65%–75% of patients with schizophrenia return to their families after discharge from the hospital and their families take care of them. (Von Kardorff et al., 2016). Further, it is estimated that 50-90% of individuals with chronic mental illness live with their family and friends (Gater et al., 2014; Ae-Ngibise et al., 2015). In Turkey, the biggest support sour-

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ces and caregivers of schizophrenia patients are the patient's index family. Furthermore, we can conclude that the majority of patients with schizophrenia live with their families (Ünlü & Baykara Acar, 2022; Turtank & Künüroğlu, 2022)As a result of the burden and stress they feel while acting as caregiver role to their family, family members of individuals with mental illness experience psychological problems such as anxiety, hopelessness, anger, depression, and insomnia (Yu et al., 2018; Ntsayagae, Myburgh & Poggenpoel, 2019; Udoh et al., 2021). Depression is seen as quite a common mental health problem among caregivers and is related to the increase in the duration of care. On the one hand, the prevalence of depression in families who take care of individuals with schizophrenia is twice as high as in other families (Derajew et al., 2017; Jeyagurunathan et al., 2017; Cheng et al., 2018). Families tend to experience negative effects such as hopelessness, lack of individual and social support, difficulty in understanding, stigma, deterioration in family relationships, and conflict in interpersonal relationships due to the uncertainty and unpredictability of the disease during care at home (Cameron et al., 2016; Shiraishi & Reilly, 2019). On the other, multiple unresolved stressors in the life of caregivers can also lead to depression (Souza et al., 2017; Kim, 2017; Koyanagi et al., 2018; Yu et al., 2018).

The emotional, social, and economic burden of families who did not receive adequate social support, who have insufficient knowledge, negative beliefs and attitudes about the disease and its treatment, and who were not able to cope with the disease, increased, added to the increase in severity of the burden, it causes the mental health status of the caregivers to worsen. In the study of Kim (2017), 108 caregivers of disabled adults, found that there was a significant positive relationship between caregiving stress, depression, and economic and psychological stress. Caqueo-Urízar et al. (2017) found that families who care for individuals with schizophrenia experience financial, emotional, and daily life difficulties. Studies by Hernandez and Barrio (2015) and Saunders and Shamsaei, Cheraghi & Bashirian, (2015) emphasized that schizophrenia has negative effects on caregiver families. The fact that caregivers are alone or without assistance in maintaining care can cause them to be inadequate in the care of the patient, disrupt their care, and experience burnout (Tel & Ertekin Pınar, 2013). In the study conducted by Tel and Ertekin Pınar (2013: 151), it was revealed that the primary caregivers of individuals with mental illness experience burnout, experience decreases in emotional exhaustion and personal achievement, and as burnout increases, it brings the risk of depression along. Kokurcan, Özpolat & Göğüs(2015) stated that the burnout rate is high in caregivers with a major mental illness disease such as schizophrenia that causes severe social difficulties. In the study, Kokurcan Özpolat & Göğüs (2015) stated that emotional burnout is the most dominant occurrence in families who care for individuals with schizophrenia. Similarly, in a study conducted by Ketre Akbaş (2022), it was found that both the emotional exhaustion and depersonalization burnout levels of families who care for individuals with schizophrenia were low, while the personal achievement burnout levels were high, while caregivers between the ages of 40-59 had higher levels of caregivers in the other age group. It was determined that caregivers who were parents or spouses of the individual they cared for and caregivers sharing the same household tend to experience more emotional burnout. In their study, Gök & Arslantaş (2023) found that the fact that a schizophrenia patient does not work and does not use his/her medications regularly increases burnout in caregivers. The fact that the primary caregiver of a schizophrenia patient is single and has another mentally ill person in the family increases the burnout level of the caregiver.

Presently, no national studies in Turkey exist in the literature that directly deal with the relationship between the burnout of caregivers of schizophrenia patients and their tendency to violence. Thus, this study aimed to examine the relationship between the burnout of caregivers of schizophrenic patients and their tendency to violence.

METHOD

Participants

The study followed quantitative methodology in that it was designed as a correlational survey. Correlational studies are studies in which the relationship between two or more variables is examined without any interference with these variables. It can be said that correlational studies are important studies that are effective in examining the relationships between examined variables, determining the level of relationship, and revealing the necessary data for higher-level research on these relationships (Büyüköztürk et al., 2018: 16-17).

Sample

The population of the study consisted of caregivers of 380 patients with schizophrenia who were registered to and affiliated with Sakarya University Training and Research Hospital and received active service from the center. The purposive sampling method, one of the non-random sampling methods, was used in the selection of the sample, as it allows for in-depth research by selecting information-rich situations depending on the purpose of the study). Purposive sampling is preferred when one or more special cases that meet certain criteria or have certain characteristics are desired to be studied (Büyüköztürk et al., 2018: 92).

The sample of the study consisted of 60 caregivers of the patients receiving active service from the center between April 1st, 2018, and May 1st, 2018. The caregivers took the primary responsibility for patients diagnosed with 'schizophrenia' according to DSM-V-TR diagnostic criteria and spent the most time with the patients, who were over 18 years old and with a cognitive level to understand the tools to be used.

Instruments and Data Collection

The instrument used for data collection was of three parts:

1) Sociodemographic information,
2) The Maslach Burnout Inventory (MBI),
3) The Violence Tendency Scale (VTS).

1) Sociodemographic Information

The socio-demographic characteristics of the patients with schizophrenia and their caregivers were examined in terms of gender, age, education, marital status, number of people in the house, people living with, occupation, disease status, and treatment and care periods of schizophrenia patients.

2) The Maslach Burnout Inventory (MBI)

The most common measurement tool used in the measurement of burnout, including in our country, is The Maslach Burnout Scale (MBI) developed by Maslach and Jackson (1981) (Çapri, 2006). The scale has been and is used by many researchers (Gündüz, Çapri and Gökçakan, 2012). MBI was adapted to Turkish by Ergin (1992) as a 5-point Likert-type scale, with Cronbach Alpha coefficients of .83, .67, and .72 for each dimension respectively. It is a scale consisting of 22 items in total and measures three dimensions: emotional exhaustion, depersonalization, and personal accomplishment. The items in the depersonalization dimension are positive, and the items in the personal accomplishment dimension are negative. High scores obtained from personal accomplishment are expressed as personal success/ failure. Accordingly, high scores on emotional exhaustion, depersonalization, and personal failure indicate high burnout and low scores indicate low burnout.

3) The Violence Tendency Scale (VTS)

The Violence Tendency Scale was developed by Göka, Bayat, and Türkçapar (1995) in a study conducted on behalf of the Ministry of National Education to measure the "violence tendencies of secondary school students". Afterward, the basic structure of the scale was restructured to have content validity. It was used in the Prime Ministry Family Research Institution's research on "Violence in the Family and the Social Field" (1998), as well as in other studies (Uysal and Bayık Temel 2009; Özgür, Yörükoğlu and Baysan Arabacı 2011; Yakut 2012). To test the reliability of the scale, the reliability coefficients within the scope of internal consistency were found to be .78 and .87 on two different occasions (T.C. Prime Ministry Family Research Institute 1998). In the study of Özgür, Yörükoğlu, and Arabacı (2011) the Cronbach Alpha reliability coefficient of the scale was found to be .88. The 5-point Likert type scale has 20 items, and higher scores indicate individuals are more prone to aggression and violence. The cutoff scores were calculated as 1-20= Very little, 21-40 = some, 41-60 = a lot, and 61-80= Too much in a study by Prime Ministry Family Research Institute (T.C. Prime Ministry Family Research Institute 1998). In this study, the reliability of VTS was found to be high as Cronbach's Alpha=0.794.

Data were collected using the scale forms from 60 participants through face-to-face interviews. Data collection took approximately 25-30 minutes for each participant. All the participants completed a written informed consent form arranged for them showing they were willing to participate.

Data Analysis

Number, percentage, mean, and standard deviation were used as descriptive statistical methods in the analysis of data.

The t-test was used to compare quantitative continuous data between two independent groups, and the One-way ANOVA test was used to compare quantitative continuous data between more than two independent groups. Scheffe test was used as a complementary post-hoc analysis to determine the differences after the ANOVA test. Pearson Correlation and regression analysis were applied to explain the relationship between and among the continuous variables of the study. This study received ethical approval from the Ethical Board of Sakarya University, Faculty of Medicine with the number 240 and date 03/01/2019.

RESULTS AND DISCUSSION

It was found that 22 (36.7%) of the caregivers were male, 38 (63.3%) were female, and according to the age variable, 23 (38.3%) were 50 years and older and below, 21 (35.0%) 51-60 years old, 16 (26.7%) over 60 years old. 41 (68.3%) caregivers were married and 19 (31.7%) were single. Twenty-six (43.3%) caregivers live at home with 2-3 people, while 34 (56.7%) live with 4 or more people. Considering whether the caregivers had any illness or not, it was determined that 28 (46.7%) of the caregivers had illnesses and 32 (53.3%) did not have any illnesses. It was determined that 14 (50.0%) of the patients had a physical disorder, 4 (14.3%) had a psychiatric disorder, and 10 (35.7%) had both physical and mental disorders (Table 1).

In addition, 40 (66.7%) of patients with schizophrenia were male. Twenty-six (43.3%) of the patients were 40 years of age or younger, 19 (31.7%) were 41-50 years old, and 15 (25.0%) were over 50 years old; It was determined that 7 (11.7%) were married and 53 (88.3%) were single. Thirty-six (60.0%) of the patients were graduates of primary school or below, 24 (40.0%) were of secondary school and above; six of them (10.0%) worked and 54 (90.0%) were unemployed. Almost all 58 (96.7%) of the patients included in the study had regular drug therapy (Table 2).

The ”tendency to violence” of the ca-

Table 1. Descriptive statistics for the caregivers

Characteristics	Groups	Frequency (n)	Percentage (%)
Gender	Male	22	36,7
	Female	38	63,3
	Total	60	100,0
Age	50 years old and below	23	38,3
	51-60 years old	21	35,0
	Over 60	16	26,7
	Total	60	100,0
Marital Status	Married	41	68,3
	Single	19	31,7
	Total	60	100,0
Number of individuals at home	2-3	26	43,3
	4 and above	34	56,7
	Total	60	100,0
People living with	Spouse	4	6,7
	Children	8	13,3
	Spouse, Children, Patient	28	46,7
	Mother and/or Father	5	8,3
	Sibling	2	3,3
	Mother-Father- Sibling- Children	5	8,3
	Spouse, Children, and others	8	13,3
	Total	60	100,0
Caregiver	Father	13	21,7
	Mother	17	28,3
	Spouse	6	10,0
	Child	5	8,3
	Sibling	17	28,3
	Relative	2	3,3
	Total	60	100,0

Characteristics	**Groups**	**Frequency (n)**	**Percentage (%)**
Education Status	Primary school and below	38	63,3
	Secondary school and above	22	36,7
	Total	60	100,0
Occupation	Housewife	36	60,0
	Freelance	5	8,3
	Civil servant	2	3,3
	Student	1	1,7
	Laborer	4	6,7
	Unemployed	1	1,7
	Retired	10	16,7
	Other	1	1,7
	Total	60	100,0
Patient	Yes	28	46,7
	No	32	53,3
	Total	60	100,0
Type of Illness	Physical disorder	14	50,0
	Psychiatric disorder	4	14,3
	Physical and psychiatric disorders	10	35,7
	Total	28	100,0

Table 2. Descriptive statistics for patients (with schizophrenia)

Characteristics	**Groups**	**Frequency (n)**	**Percentage (%)**
Gender	Male	40	66,7
	Female	20	33,3
	Total	60	100,0
Age	40 years old and below	26	43,3
	41-50 years old	19	31,7
	Over 50 years old	15	25,0
	Total	60	100,0
Marital Status	Married	7	11,7
	Single	53	88,3
	Total	60	100,0
Education Status	Primary school and below	36	60,0
	Secondary school and above	24	40,0
	Total	60	100,0
Age Illness Started	20 years and below	27	45,0
	Over 20 years	33	55,0
	Total	60	100,0
Duration of the Illness	10 years and below	21	35,0
	11-20 years	22	36,7
	Over 20 years	17	28,3
	Total	60	100,0

Characteristics	Groups	Frequency (n)	Percentage (%)
Duration of patient care (year)	10 years and below	26	43,3
	Over 10 years	34	56,7
	Total	60	100,0
Time spent with the patient	8 Hours and below	37	61,7
	Over 8 hours	23	38,3
	Total	60	100,0
Hospitalization in the last year	No hospital stay	49	81,7
	Once or twice	11	18,3
	Total	60	100,0
Medication	Yes	58	96,7
	No	2	3,3
	Total	60	100,0
Person helping treatment	Existent	24	40,0
	Non-existent	36	60,0
	Total	60	100,0
Person helping treatment	Aunt	2	8,3
	Other Family Members	22	91,7
	Total	24	100,0
Proceedings in the last 6 months	Yes	4	6,7
	No	56	93,3
	Total	60	100,0
Employment	Employed	6	10,0
	Unemployed	54	90,0
	Total	60	100,0
Income Status	With income	45	75,0
	Without income	15	25,0
	Total	60	100,0
Type of Income	Home care aid	4	8,9
	Disability pension	12	26,7
	Retirement pension	18	40,0
	Wage	7	15,6
	More than one salary	4	8,9
	Total	45	100,0

regivers participating in the research was low (42,517±7,950); low level of ”emotional exhaustion” (2.169±0.816); “depersonalization” level is very weak (1.470±0.429); high level of “low sense of personal accomplishment” (3,960±0.454); “general burnout” level was determined as moderate (2.661±0.391) (Table 3).

There was a moderate, positively significant relationship between emotional exhaustion and violence tendency (r=0.521; p=0.000<0.05). There is a weak, positively significant relationship between depersonalization and violence

Table 3. Violence tendency and burnout scores

	N	Ort	Ss	Min.	Max.	
Violence Tendency	60	42,517	7,950	28,000	59,000	20-80
Emotional Exhaustion	60	2,169	0,816	1,000	3,670	1-5
Depersonalization	60	1,470	0,429	1,000	2,600	1-5
Low Personal Achievement	60	3,960	0,454	3,120	4,880	1-5
General Burnout	60	2,661	0,391	1,950	3,500	1-5

tendency (r=0.328; p=0.011<0.05). There was a weak, positively significant relationship between depersonalization and emotional exhaustion (r=0.285; p=0.027<0.05). There is a moderate, positively significant relationship between general burnout and violence tendency (r=0.539; p=0.000<0.05). There was a significant positive correlation between general burnout and emotional exhaustion (r=0.895; p=0.000<0.05). There is a weak, positively significant relationship between general burnout and depersonalization (r=0.413; p=0.001<0.05). There is a weak, positively significant relationship between general burnout and low personal accomplishment (r=0.316; p=0.014<0.05). Relationships between other variables were not statistically significant (p>0.05) (Table 4).

The regression analysis performed to determine the cause-effect relationship between general burnout and the tendency to violence was found to be significant (F=23,794; p=0.000<0.05). It was observed that the relationship (explanatory power) with the general variables of burnout as a determinant of the level of violence tendency was strong (R2=0.279). The general level of burnout of caregivers increases the level of violence tendency (ß=10.957) (Table 5).

Table 4. Correlation Analysis Between Violence Tendency and Burnout Scores

		Tendency to Violence	Emotional Exhaustion	Depersonalization	Low sense of Personal Accomplishment	General Burnout
Tendency to Violence	r	1,000				
	p	0,000				
Emotional exhaustion	r	0,521**	1,000			
	p	0,000	0,000			
Depersonalization	r	0,328*	0,285*	1,000		
	p	0,011	0,027	0,000		
Low sense of Personal Accomplishment	r	0,031	-0,069	-0,188	1,000	
	p	0,814	0,601	0,150	0,000	
General Burnout	r	0,539**	0,895**	0,413**	0,316*	1,000
	p	0,000	0,000	0,001	0,014	0,000

*<0,05; **<0,01

Table 5. The Effect of Burnout on Violence Tendency

Dependent Variable	Independent Variable	ß	t	p	F	Model (p)	R^2
Tendency to Violence	Stable	13,355	2,211	0,031	23,794	0,000	0,279
	General Burnout	10,957	4,878	0,000			

The regression analysis performed to determine the cause-effect relationship between emotional exhaustion, depersonalization, low personal accomplishment, and violence tendency was found to be statistically significant (F=8,657; p=0,000<0.05). It was observed that the relationship (explanatory power) with the variables of emotional exhaustion, depersonalization, and low sense of personal accomplishment is a determinant of the level of violence tendency (R2=0.280). The level of emotional exhaustion of caregivers increases the level of violence tendency (ß=4,549). The level of depersonalization of caregivers does not affect the level of violence tendency (p=0.072>0.05). The low level of personal accomplishment of caregivers does not affect the level of violence tendency (p=0.362>0.05) (Table 6).

The limitations caused by major mental illnesses such as Schizophrenia itself negatively affect not only the patient but also the family. While burnout is observed especially in those who care for those who have a mental illness in the family and need constant care, it is observed that caregivers of individuals with schizophrenia, which cause problems at various levels in their work, social and private life by significantly affecting the thoughts, perceptions, emotions, and behaviors of the person, often face burnout (Ünlü & Baykara

Table 6. The Effect of Burnout Sub-Dimensions on Violence Tendency

Dependent Variable	**Independent Variable**	**ß**	**t**	**p**	**F**	**Model (p)**	**R^2**
Tendency to Violence	Stable	19,636	2,157	0,035	8,657	0,000	0,280
	Emotional Exhaustion	4,549	4,052	0,000			
	Depersonalization	3,970	1,831	0,072			
	Low sense of personal accomplishment	1,813	0,920	0,362			

Acar, 2022; Kokurcan, Özpolat & Göğüs, 2015; Ketre Akbaş, 2022: 70). The reasons explained among different factors such; such as the patient's disability, the continuation of the illness journey are tough and breathless way, rehospitalizations, social exclusion, stigma increase the caregiver's burden of care and the possibilities an increment of the possibility of deterioration in the mental and physical health among the caregivers. Studies have also revealed that the level of severity of the major mental illness of individuals with schizophrenia impairs the mental health of caregivers (Vijayalakshmi, 2016; Derajew et al., 2017; Jeyagurunathan et al., 2017; Cheng et al., 2018). Caregivers who mentally deteriorated and experienced burnout often experience multiple physical symptoms including fatigue, exhaustion, loss of energy, lack of motivation, headaches, sleep disorders, gastrointestinal disorders, weight loss, breathing difficulties, psychosomatic symptoms, irritability, anger, symptoms such as difficulty in cognitive skills, frustration, depressed mood, anxiety, impatience, decreased self-esteem, worthlessness, inability to make decisions, negative attitude towards others, deterioration in relationships, increase in accidents and injuries (Söylemez, 2022; Ünlü & Baykara Acar, 2022; Yıldız et al., 2023; Altın, 2023). At this point, families who care for a person with schizophrenia who has a feeling of burnout cannot endure with their patients from time to time during the care process, increasing the possibility of resorting to anger, resentment, mental and verbal violence, physical force, and aggressive attitudes and behaviors towards patients. As mentioned before, this study aimed to examine the relationship between the burnout of caregivers of schizophrenia patients and their tendency to violence.

It was determined that the majority of patients with schizophrenia included in the study were male, aged 40 and under, and the majority of them were single and primary school graduates or below (literate, not literate). In a study conducted on 101 patients who received service from Zonguldak Karaelmas University Faculty of Medicine psychiatry outpatient clinic, it was stated that most of the patients with schizophrenia were male, and nearly half of them were single and primary school graduates. In various studies, it has been determined that patients with schizophrenia are mostly young and middle-aged adults, more than half of them are single, and their education level is primary school graduate or literate (Temmingh & Stein, 2015; Harmanci & Cetinkaya Duman, 2016; Kaya & Öz, 2019). These findings of the study are similar to the literature.

In the study, it was detected that more than half of the patients with schizophrenia started their first illness over the age of 20, and a significant part of them received treatment for the disease for 11 and 20 years. It was detected that the majority of the caregivers gave care to their patients for 10 years or more, and a significant part of them spent more than 8 hours a day with their patients. In a study conducted by Kara□aç and Çalık Var (2019), the average duration of care for families giving care to patients with schizophrenia was 8,5 years, and 16 years in a study conducted by İnan, Duman & Sarı (2021). Since schizophrenia is a major mental illness that starts at an early age, it is an expected outcome that the caregiver will live with the patient for several extended years.

More than half of the caregivers included in the research are women. In the literature, it is stated that family members who take responsibility for patient care vary according to gender, and women play more roles than men (Shamsaei, Cheraghi & Bashirian, 2015; Harmanci & Cetinkaya Duman, 2016; Kaya & Öz, 2019; Karağaç & Çalık Var, 2019; Gök & Arslantaş, 2023; Yu et al., 2018).

In the study, it was determined that a significant part of the caregivers of patients with schizophrenia were in the "50 years and under" and "51-60" age groups. The ages of caregivers vary in studies. In a study conducted in Turkey, it was determined that the average age of family members responsible for the care of patients with schizophrenia was in the 45 age group (Karaa□aç & Çalık Var, 2019), and in a study conducted in Iran, this average was 53.3 (Shamsaei, Cheraghi

& Bashirian, 2015). In a similar study conducted in China, the average age was 43.82 (Hsiao, Lu &Tsai, 2020). while it was stated that this average increased to 59 in the USA. The mean age in the care of patients with schizophrenia was found to be 50 years in the literature review (Gupta et al., 2015; Ramzani et al., 2019; Kokurcan, Özpolat & Göğüs 2015). The literature findings are similar to our study.

It was determined that most of the caregivers participating in the study were married. Mulud & McCarthy (2016) found that 71.1 % of the relatives of the patients with schizophrenia were married, while Kokurcan et al., (2015) found that 26 % of them were married. Thus, depending on the sample characteristics, marital status varies. Moreover, the effect(s) of the marital status of the relatives of the patients with schizophrenia on the patients needs to be investigated, for the social context is significant in terms of disorder management.

In the study, it was determined that most of the caregivers were primary school graduates and below (literate, not literate). This result shows that the education level of caregiver family members is low. Ribé et al. (2017) found in their research that 46 % of caregiver family members were primary school graduates. Although this rate is lower than the findings of the research, it supports the low level of education. In studies conducted in other countries, Shamsaei, Cheraghi & Bashirian (2015) found in their research that 36,8 % of caregiver family members held primary school degrees, while Mulud & McCarthy. (2016) found that 18 % of caregiver family members were no formal education /primary school graduates.

In the study, it was determined that a significant majority of caregivers were housewives. Ashrafian et al. (2018) found that 45 % of the family members responsible for the care of patients with schizophrenia were housewives, and Noghani et al. (2016) found that 53,8 % of the family members who gave care were housewives.

In the study, 28.3% of caregivers with the same percentage were found to be mothers and siblings. In the studies conducted, it was determined that the caregivers of patients with schizophrenia were mostly mothers (Ribé et al., 2017; Kızılırmak & Küçük, 2016), and in some studies, the caregivers were mothers and fathers (Derajew et al., 2017; Hsiao, Lu & Tsai, 2020). Vijayalakshmi (2016), on the other hand, found that caregivers were mostly the spouses of the patients. In the study, it was determined that less than half of the caregivers had any ailment, half of those who had the disease had a physical illness and the other half had both a psychiatric and physical illness. In a study conducted by Derajew et al. (2017) in Ethiopia, it was determined that 19 % of the relatives of patients who took care of patients with schizophrenia had mental illness. Vijayalakshmi (2016), found that 18 % of caregivers are depressed.

In the study, it was concluded that the subdimensions of burnout significantly affected the tendency to violence. Also, there was a positive and significant relationship between burnout and violent tendencies in caregivers. In other words, burnout of caregivers increases (general) violence tendency.

No research has been found in the literature on the relationship between the burnout of caregivers of patients with schizophrenia and their tendency to violence. For this reason, the research findings were compared with the findings of similar studies related to the subject in the literature.

In this study, it was determined that caregivers with schizophrenia experienced moderate burnout, their tendency to violence was low, emotional exhaustion was weak, depersonalization scores were very weak, and personal accomplishment scores were high. The study by Onwumere et al. (2018), observed emotional exhaustion in 58%, high levels of depersonalization in 31%, and low levels of personal accomplishment in 43% of relatives of psychiatric patients. Kokurcan, Özpolat & Göğüs (2015) found that the emotional exhaustion scores (14.55±8.15) and personal accomplishment scores of relatives of schizophrenia patients were high (21.22±6.01). Similarly, Gülbol (2020) reported that the emotional exhaustion score (25.68±8.21) and personal accomplishment score (25.16±5.09) of caregivers of patients with schizophrenia were high. Although there are various findings in the literature, our research findings are similar to most of the literature findings.

When the cause-effect relationship between the sub-dimensions of burnout, emotional exhaustion, depersonalization, low personal accomplishment, and violent tendencies was examined, a significant relationship was found. It has been observed that the variables of emotional exhaustion, depersonalization, and low sense of personal accomplishment, which are the determinants of the level of violence, have a strong relationship. The level of emotional exhaustion of caregivers increases the level of violence tendency. Depersonalization and low personal accomplishment levels of caregivers do not affect the level of violence tendency.

In our study, it was found that female caregivers experienced more emotional exhaustion than male caregivers. Studies have also found that female caregivers experience more burnout than male caregivers (Kokurcan, Özpolat, and Gö□üs, 2015; Shamsaei, Cheraghi & Bashirian, 2015; Harmanci & Cetinkaya Duman, 2016; Derajew et al., 2017; Gök and Arslanta□, 2023). The findings of the study are similar to the findings of other studies. It has been determined that caregivers "50 years and under" experience low personal accomplishment more than other age groups. Single-marital status caregivers have a lower sense of personal accomplishment than married caregivers. In our study, it was determined that single people experience burnout more than married people.

Emotional burnout scores of caregivers who are primary school graduates or below (literate, not literate) were found to be higher than those of secondary school and above. This result can be explained by the fact that people with low levels of education may be unable to cope with stress, may not be able to use the necessary resources to cope with stress, may have difficulty using social supports, and have low social and economic status and susceptibility to burnout and depression.

In the study, the emotional exhaustion scores of the caregivers of the patients "over 10 years" were found to be higher than the emotional exhaustion scores of those who were "10 years and under". Again, the low personal accomplishment scores of those who did not have a second person to support the treatment in patient care were found to be higher than the low personal accomplishment scores of those who had someone else taking care of the patient. This result can be explained by the fact that the disease does not evanescence, the caregivers cannot receive adequate social support, and they experience stress, anxiety, self-despair, and guilt.

The violence tendency scores of the caregivers who participated in the study who lived "4 or more at home" were higher than the violence tendency scores of those who had less "2-3" at home. This result can be explained by the fact that the patient's symptoms of illness are severe, other family members believe that the patient will not be well and that the effect of the treatment will be insufficient, causing the family members to experience stress within themselves, increasing their tendency to violence.

It was found that caregivers with physical and/or mental illness had a significantly higher tendency to violence than caregivers without any illness. In studies on this issue, Vijayalakshmi (2016), found that caregivers of patients with schizophrenia had high levels of depression symptoms along with psychosocial problems. Derajew et al. (2017) examined the prevalence of depression and its associated factors among primary caregivers of patients with severe mental illness in southwestern Ethiopia. The overall prevalence of depression among primary caregivers of patients who suffered mental illness is 12 (19%). Moderate, moderately severe, and severe types of depression were found in 11.3%, 3.5%, and 4.2% of caregivers with depression, respectively. Stanley et al. (2017) also emphasized in their study with 75 relatives of patients diagnosed with schizophrenia that caregivers' high scores in depression, anxiety, and stress are indicators of increased psychological distress in caregivers. This result suggests that caregivers with mental illness sometimes fail to be patient and turn to anger, anger, mental and verbal violence, physical force, and aggressive attitudes and behaviors toward patients.

To conclude, in this study, burnout and violence tendencies of caregivers were found to be statistically significantly related to the patient's gender, age, marital status, educational status, income status, age of onset of the illness, duration of treatment, hospitalization in the last year and legal problems related to the patient in the last six months.

CONCLUSION

In the study, it was determined that there was a significant positive relationship between burnout and the violent tendencies of caregivers of individuals diagnosed with schizophrenia. In other words, as burnout increases in caregivers, the risk of violent tendencies increases. In this study, it was determined that schizophrenia caregivers experienced moderate burnout and low violent tendencies. However, it is seen that the violent tendencies of caregivers with physical and/or mental illness are higher than the violent tendencies of caregivers without any illness. This situation shows that caregivers of patients with schizophrenia are a risk group in terms of experiencing burnout and violent tendencies, and the importance of biopsychosocial monitoring of caregivers.

At this point, during a chronic major mental illness such as schizophrenia, it is necessary to evaluate the problems and needs of the caregiver family from a holistic perspective. The importance of the social work profession, which deals with both the individual and the individual's environment at the same time, based on the "individual-in-environment" approach in adapting to the treatment process of individuals diagnosed with schizophrenia and their families, ensuring their social functionality, protecting their rights and benefiting individuals and families from appropriate service models, is undeniable. In mental health studies carried out with a multidisciplinary team, the social worker, who is a member of the team, mostly works in cooperation with psychiatrists, psychiatric nurses, and psychologists. In this context, socialization groups, support, training, and interaction groups are established for caregivers of individuals with schizophrenia both in TRSMs (Community Mental Health Centers) and the psychiatric clinics of hospitals; It should be ensured that caregivers strengthen their coping mechanisms in the disease treatment process, overcome feelings of fear and shame about exclusion and discrimination, and increase their ability to survive in society. Families should be supported to learn and apply effective methods in coping with the disease. Mental care professionals should also constantly monitor and evaluate the families of patients with chronic mental problems and symptoms and refer them to participate in self-help groups. Thus, it is predicted that the dissemination of psychosocial practices that will include caregivers in the treatment of patients with schizophrenia will help families reduce feelings of burnout and depression.

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