

The Effect of Violence on the Diagnoses and the Course of Illness Among Female Psychiatric Inpatients

Yataklı Psikiyatri Servisinde Tedavisi Süren Kadın Hastalarda Aile İçi Şiddetin Hastalık Tanıları ve Hastalık Süreciyle İlişkisi

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ABSTRACT

Introduction: The aim of the study was to determine the rate of exposure to domestic violence among female inpatients at any period of their lives; to investigate the effect of different forms of violence on the diagnoses and the course of the illness.

Method: The study was conducted on 102 female inpatients treated at Bakırköy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery. The Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I) was administered and socio-demographic and clinical data was collected. A form designed for the assessment of violence was used to evaluate domestic violence.

Results: Ninety patients reported that they had been subjected to some kind of violence at some period of their lives. The parents or husbands were the most frequently reported persecutors. Seventy-three patients reported that they had been subjected to violence before the onset of their illness. Seventy-one had been subjected to physical, 79 to verbal, 42 to sexual, 52 to economic violence, and 49 to constraints on social relationship formation. Comorbid diagnosis of post traumatic stress disorder (PTSD) was related to all types of violence. The rate of suicide attempt was found to be significantly related to verbal-emotional violence. Only 12 patients had previously reported being subjected to domestic violence to their psychiatrist.

Conclusion: Domestic violence, an often overlooked phenomenon, is prevalent among women with psychiatric disorders. Subjection to domestic violence is found to be correlated with PTSD and suicidal attempt. (*Archives of Neuropsychiatry 2014; 51: 1-10*)

Key words: Domestic violence, psychiatric inpatient, course of illness

Conflict of Interest: The authors reported no conflict of interest related to this article.

ÖZET

Amaç: Bu çalışmada yatırılarak psikiyatrik tedavi gören kadın hastalarda yaşam boyu aile içi şiddete maruz kalma oranının saptanması; şiddetin farklı tiplerinin hastalık tanıları ve hastalığın seyri üzerine etkilerinin araştırılması hedeflenmiştir.

Yöntem: Çalışma Bakırköy Ruh Sağlığı ve Sinir Hastalıkları Eğitim ve Araştırma Hastanesi'nde yatarak tedavi gören 102 hasta ile yapıldı. SCID-I, Sosyodemografik ve Klinik Veri Formu, Şiddet Değerlendirme Formu kullanıldı.

Bulgular: Doksan hasta yaşamları boyunca en az bir tipte şiddete maruz kaldıklarını belirtti. Şiddeti uygulayanlar en sık anne-baba ve eşlerdi. Yetmişüç hastada şiddete maruz kalma hastalık başlangıcından önceye uzanıyordu. Yetmişbir hasta fiziksel, 79 hasta sözel, 42 hasta cinsel, 52 hasta ekonomik şiddete maruz kalmıştı, 49 hastanın sosyal ilişkileri kısıtlanmıştı. Tüm şiddet tipleri ile Travma Sonrası Stres Bozukluğu ek tanısının varlığı, sözel-duygusal şiddet ile intihar girişiminde bulunma arasında anlamlı ilişki saptandı. Hastalardan sadece 12'si aile içi şiddete maruz kaldıklarını daha önce psikiyatriste bildirmişti.

Sonuç: Sıklıkla gözardı edilen bir gerçek olan aile içi şiddet psikiyatrik hastalığı olan kadınlar arasında yaygındır. Aile içi şiddete maruz kalma, TSSB ve intihar girişimi ile ilişkili bulunmuştur. (*Nöropsikiyatri Arşivi 2014; 51: 1-10*)

Anahtar kelimeler: Aile içi şiddet, yatarak psikiyatrik tedavi gören hastalar, hastalık seyri

Çıkar Çatışması: Yazarlar bu makale ile ilgili olarak herhangi bir çıkar çatışması bildirmemişlerdir.

Introduction

Domestic violence is defined as maltreatment of a family member by another family member. One of the family members demonstrates behavior of neglect or emotional, verbal, physical or sexual abuse and the family member who is exposed to these behaviors experiences misery, sorrow, shame and

trauma. Domestic violence is a health problem which shakes the family structure to its foundations, causes to very serious outcomes and trauma in all family members concerning all segments of the community (1).

It is known that domestic violence is common in the community and occurs every 20 seconds (2). It has been reported that 70% of the domestic violence events result in injury (3).

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The first thing coming to mind is physical and sexual violence in terms of domestic violence. However, emotional-verbal violence, economical violence and violence constraining social relations are also very common and cause to long-term traumas. The WHO addressed violence types as domestic violence, violence against spouse, physical violence, severe physical violence, sexual abuse, forceful sexual intercourse and psychological abuse and sexual abuse in the childhood in the guide recommended for studies related with violence against women and included both verbal violence and violence constraining social relations and economical freedom in the definition of emotional violence. Non-physical violence frequently leads to physical violence in time (5).

It has been reported that adverse life events may be observed more frequently in individuals with a diagnosis of psychiatric illness starting from the early periods of life (6). There are studies reporting that the possibility of occurrence of psychiatric symptoms increases as the frequency and intensity of the violence exposed increase (7,8). When psychiatric patients who had been exposed to violence in the childhood were compared with the ones who had not been exposed to violence, it was found that the former had earlier onset of illness, were hospitalized more frequently and had longer hospitalization times, used antipsychotic drugs more frequently and isolation room was used more frequently for these patients (9). Additionally, it was reported that recurrence of illness, suicide attempt and self-harming behavior were observed more frequently in these patients (10). In the study of Read (11) conducted in 1998, it was found that the onset of psychiatric illness was observed at markedly earlier ages especially in the individuals who had been exposed to sexual violence in the childhood. Review of 15 studies published between 1984 and 1996 showed that 64% of the women with a psychiatric diagnosis had been exposed to physical or sexual violence in the childhood. In this review article, it was reported 59% of the female psychiatric inpatients stated that had been exposed to sexual violence in the childhood, 44% stated that they had been exposed to physical violence and 29% stated that they had been exposed to both physical and sexual violence (12).

In our country, sensitiveness and awareness related with psychiatric problems caused by domestic violence are gradually increasing. In the study of Vahip and Doğanavşargil (13) conducted with female patients presenting to psychiatry outpatient clinic in 2006, 63% of the participants stated that they had been exposed to physical violence in the childhood by their parents, 62% stated that they had been exposed to physical violence by their husbands and 42% stated that they had been exposed to physical violence both by their parents in the childhood and by their husbands in the adulthood. In the study of Akyüz et al. (14), the rate of exposure to sexual, emotional, verbal and physical violence was found to be high in female patients with somatic symptoms. Again, the rates of exposure to emotional and eco-

nomical violence were found to be high in the patients with anxiety disorder, the rate of exposure to sexual violence was found to be high in the patients with a diagnosis of depression and the rate of exposure to physical violence was found to be high in the patients with a diagnosis of psychotic disorder in the same study. In our country, the frequency of exposure to violence in female inpatients has not been investigated. Friedman and Lou (6) reported that female inpatients reported exposure to violence with a rate of 50-64% and this rate ranged between 23% and 50% in female outpatients in a review article dated 2007. However, only physical and sexual violence were investigated in these studies. On the other hand, emotional-verbal violence, economical violence and violence restricting social relations have been frequently ignored in studies, though they occur very commonly (5). In this study, it was aimed to examine the relation of domestic violence and violence types with disease course in female psychiatric inpatients.

Methods

One hundred and two consecutive female inpatients who were hospitalized in Bakırköy Research and Training Hospital for Psychiatry, 2nd Psychiatry Ward between July 2008 and November 2008 were evaluated. The interviews intending to determine domestic violence were made in the last week of treatment after improvement was provided in the acute period of the disease in order to provide adequate cooperation of patients and obtain reliable data.

Patients with confusion due to electroconvulsive therapy, mental retardation, epilepsy, neurological disorders, amnesic disorders, dementia and delirium were not included in the study. Participation in the study was based on voluntariness and the patients who gave written and verbal informed consent were included in the study. Approval was obtained from the hospital's ethics committee for the study.

Information was collected by the Sociodemographic and Clinical Data Form. A semi-structured data form was created by the investigators based on the Conflict Tactics Scale (CTS2) to evaluate domestic violence. The Conflict Tactics Scale (CTS2) was developed by Straus et al. in 1996 and is used widely for evaluation of different types of domestic violence (15). The data form prepared interrogated presence, type (physical, emotional-verbal, sexual, economical, restricting social relations), frequency and duration of domestic violence, who domestic violence was applied by and the reaction of the person exposed to violence. The numbers stated below the titles of A, C and D on the first page of the data form were noted for each of elaborated violence type.

The Structured Clinical Interview for DSM-IV Clinical Version (SCID-I) which was developed by First et al. (16) and adapted to Turkish by Çoraçioğlu et al. (17) in 1999 was applied to classify the patients' diagnoses.

At the end of the study, the necessary briefing was given to the subjects who were found to have been exposed to domestic violence to reach institutions which gave support and briefing in this area.

Statistical analysis

The data were evaluated using SPSS 13.0 for Windows program. In statistical assessment, chi-square test was used to evaluate the correlations between categorical variables and Student’s t test was used to evaluate the difference between the mean values of continuous variables belonging to two groups. Chi-square test was used to evaluate the correlation between different violence types and the disease course and single factor analysis of variance was used to evaluate the difference between the mean values of continuous variables in multiple groups. A p value of <.05 was considered statistically significant in all statistical calculations.

Results

The ages of 102 patients included in the study ranged between 20 and 75 years. The mean age was 38.63±11.69. In clinical interviews performed using SCID-I, unipolar Major Depression was found in 29 (28.4%) of the patients included in the study (psychotic properties were present in 17 (16.7%)), Bipolar Mood Disorder – manic episode was found in 29 (28.4%) (psychotic properties were present in 19 (18.6%)), Bipolar Mood Disorder – depressive episode was found in 17 (16.7%) (psychotic properties were present in 9 (8.8%)), Schizophrenia and Schizoaffective disorder was found in 27 (26.5%) and a codiagnosis of Posttraumatic Stress Disorder (PTSD) was found in 45 (44.1%). The sociodemographic properties and the distribution of the diagnoses are summarized in Table 1.

Twelve patients (11.7%) reported that they had never been exposed to any type of violence in any period of their lives. 90 patients (8.2%) had been exposed to at least one type of violence. It was found that 73 of the patients (71% of all patients) had been exposed to violence before the disease onset. 17 patients (16.6%) stated that they had been exposed to violence after the disease onset. It was found that exposure to violence occurred before the disease onset in 25 patients who had a diagnosis of Unipolar Major Depression and reported that they had been exposed to violence. 20 of 23 patients who had a diagnosis of Schizophrenia and Schizoaffective Disorder had been exposed to violence before the disease onset. In 28 of 42 patients who had a diagnosis of Bipolar Mood Disorder, exposure to violence had started before the disease onset. Psychiatric disease occurred after physical violence in 53.92% of the patients who had been exposed to physical violence. In 19.61% of the patients who had been exposed to sexual violence, psychiatric disease occurred after sexual violence.

Ninety (88.2%) of 102 patients included in the study had not talked with their physicians about domestic violence. Only 4 individuals among the patients who stated that they had been

Table 1. Sociodemographic properties of the patients and the distribution of psychiatric diagnoses

		Mean	SD
Age		36.83	11.69
Education time		7.15	3.92
		n	%
Working status	Quitted work	11	10.8
	Officer	7	6.8
	Housewife	62	60.8
	Laborer	13	12.7
Education	Contract labor	9	8.8
	Not attended school	7	6.8
	Shorter than 8 years	49	48.3
Marital status	Longer than 9 years	46	45.1
	Married	53	54.9
	Single	30	29.4
	Divorced	14	13.7
Current life style	Widowed	5	4.9
	With spouse and children	38	37.2
	With own parents	35	34.3
	Alone	12	11.8
	With children	5	4.9
Distribution of diagnoses	With spouse and spouse’s family	12	11.8
	Unipolar depression	29	28.4
	BPMD-manic episode	29	28.4
	BPMD-depressive episode	17	16.7
	Schizophrenia-schizoaffective disorder	27	26.5
PTSD	45	44.1	

BPMD: bipolar mood disorder; PTSD: posttraumatic stress disorder

exposed to violence (4.3% of the patients exposed to violence) had been subjected to violence by someone outside the family. When the question of “who performed violence most commonly?” was examined, it was found that 31 patients (34.0%) had been subjected to violence both by their husbands and parents; 13 individuals (14.2%) had been subjected to violence by their parents; 16 individuals (17.5%) had been subjected to violence only by their husbands; 5 individuals (5.4%) had been subjected to violence only by their fathers; 4 individuals (4.4%) had been subjected to violence by their husbands and by their husband’s family; 4 individuals (4.4%) had been subjected to violence by their siblings, 3 individuals (3.3%) had been subjected to violence by their mothers; 3 individuals (3.3%) had been subjected to violence by their own family, husband and husband’s family; 4 individuals (4.4%) had been subjected to violence by someone outside their parents, husband and husband’s parents and 3

individuals (3.3%) had been subjected to violence by their husbands and someone outside the family.

Seventy-nine patients (77.4%) had been exposed to emotional-verbal violence, 71 patients (69.6%) had been exposed to

physical violence, 42 patients (41.1%) had been exposed to sexual violence and 52 patients (51%) had been exposed to economical violence in some period of their lifetimes. Forty-nine patients (48%) had been exposed to violence restricting social relations. A total of 77 patients (75.5%) had been exposed to physical or sexual violence in some period of their lifetimes. The mean age of exposure to physical violence was found to be 25 years and 31 of the individuals who had been exposed to physical violence had been exposed to violence before the age of 15 years. The mean age of exposure to sexual violence was found to be 33 years and 11 of these individuals had been exposed to sexual violence before the age of 15 years.

The frequency of the diagnosis of PTSD ($X^2=9.15$, $p=.002$) and the frequency of previous suicide attempt ($X^2=4.26$, $p=.039$) were found to be significantly higher in the patients who had been exposed to emotional or verbal violence compared to the ones who had not been exposed to emotional or verbal violence. When the two groups were compared in terms of the distribution of psychiatric diagnosis, presence of psychotic character and the frequency of hospitalization, no statistically significant difference was found (Table 2).

The frequency of PTSD was found to be significantly higher in the patients who had been exposed to physical violence ($X^2=18.96$, $p<0.001$), sexual violence ($X^2=9.10$, $p=.003$), economical violence ($X^2=9.65$, $p=0.002$) and violence restricting social relations ($X^2=14.28$, $p<0.001$). No significant correlation was found with these four types of violence in terms of the distribution of psychiatric diagnoses, presence of psychotic character and presence of suicide attempt (Table 3,4,5,6). Fort-seven (66.2%) of the patients who had been exposed to physical violence were hospitalized for 2 or more times. 25 (59.6%) of the patients who had been exposed to sexual violence were hospitalized for 2 or more times. 53 (67.1%) of the patients who had been exposed to emotional-verbal violence were hospitalized for 2 or more times. 31 (59.2%) of the patients who had

Table 2. Comparison of clinical properties between the patients who had and had not been exposed to emotional-verbal violence

		Emotional-verbal violence				C2	p
		Yes		No			
		n	%	n	%		
Diagnosis	Mood disorder	58	73.4	17	73.9	57	.902
	Schizophrenia and schizoaffective disorder	21	26.6	6	26.1		
Psychotic character	Yes	53	67.1	17	73.9	.38	.535
	No	26	32.9	6	26.1		
PTSD	Yes	41	60.3	4	21.1	9.15	.002**
	No	27	39.7	15	78.9		
Suicide attempt	Yes	50	63.3	9	39.1	4.26	.039*
	No	29	36.7	14	60.9		
Number of hospitalizations and more	1	26	32.9	8	34.8	.28	.869
	2	14	17.7	3	13.0		
	3	39	49.4	12	52.2		
	and more						

*The correlation between exposure to emotional-verbal violence and presence of posttraumatic stress disorder was found to be statistically significant.
**The frequency of suicide attempt was found to be higher in the group exposed to emotional-verbal violence and this finding is statistically significant.

Table 3. Comparison of the clinical properties in patients who had and had not been exposed to physical violence

		Physical violence				c ²	p
		Yes		No			
		n	%	n	%		
Diagnosis	Mood disorder	54	76.1	21	67.8	2.05	.562
	Schizophrenia and schizoaffective disorder	17	23.9	10	32.3		
Psychotic characteristic	Yes	51	71.8	19	61.3	1.11	.291
	No	20	28.2	12	38.7		
PTSD	Yes	40	67.8	5	17.9	18.96	.000***
	No	19	32.2	23	82.1		
Suicide attempt	Yes	42	59.2	17	54.8	.16	.685
	No	29	40.8	14	45.2		
Number of hospitalization	1	24	33.8	10	32.3	.6	.740
	2	13	18.3	4	12.9		
	3 and more	34	47.9	17	54.8		
	more						

*** The correlation of exposure to physical violence with presence of the diagnosis of posttraumatic stress disorder was found to be statistically significant.

Table 4. Comparison of the clinical properties in patients who had and had not been exposed to sexual violence

		Sexual violence				c ²	p
		Yes		No			
		n	%	n	%		
Diagnosis	Mood disorder	35	83.3	40	66.7	6.51	.089
		Schizophrenia and schizoaffective disorder	7	16.7	20		
Psychotic characteristic	Yes	33	78.6	37	61.7	3.27	.070
	No	9	21.4	23	38.3		
PTSD	Yes	25	71.4	20	38.5	9.10	.003**
	No	10	28.6	32	61.5		
Suicide attempt	Yes	24	57.12	35	58.3	0.01	.905
	No	18	42.9	25	41.7		
Number of hospitalization	1	17	40.58	17	28.3	1.82	.402
	2	7	16.7	10	16.7		
	3 and more	18	42.9	33	55.0		

**A statistically significant correlation was found between exposure to sexual violence and posttraumatic stress disorder.

Table 5. Comparison of the clinical properties in patients who had and had not been exposed to economical violence

		Economical violence				c ²	p
		Yes		No			
		n	%	n	%		
Diagnosis	Mood disorder	40	76.9	35	70	3.45	.326
		Schizophrenia and schizoaffective disorder	12	23.1	15		
Psychotic characteristic	Yes	35	67.3	35	70.0	.08	.770
	No	17	32.7	15	30.0		
PTSD	Yes	30	68.2	15	34.9	9.65	.002**
	No	14	31.8	28	65.1		
Suicide attempt	Yes	33	63.5	26	52.0	1.37	.241
	No	19	36.5	24	48.0		
Number of hospitalization	1	21	40.4	13	26.0	2.86	.239
	2	9	17.3	8	16.0		
	3 and more	22	42.3	29	58.0		

**The correlation between exposure to economical violence and the diagnosis of posttraumatic stress disorder was found to be statistically significant.

been exposed to economical violence were hospitalized for 2 or more times. The number of individuals with 3 or more hospitalizations was found to be significantly high among the individuals who had not been exposed to violence restricting social relations ($X^2=7.26$, $p=.026$) (Table 6).

Discussion

In our study, the relation of exposure to 5 types of violence (physical violence, verbal violence, sexual violence, economical violence and violence restricting social relations) with the disease course was investigated in female inpatients. It was found that 88,3% of the patients had been exposed to at least one type of violence in their lifetime and the most common types of violence were verbal and physical violence. It was found that violence occurred before the disease in many patients and the individuals who applied violence were mostly the parents and husbands. In addition, it was also found that all violence types increased the frequency of PTSD and exposure to emotional-verbal violence additionally increased the frequency of suicide attempt.

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Table 6. Comparison of the clinical properties in patients who had and had not been exposed to violence restricting social relations

		Violence restricting social relations				c ²	p
		Yes		No			
		n	%	n	%		
Diagnosis	Mood disorder	37	75.6	38	71.7	2.54	.467
	Schizophrenia and schizoaffective disorder	12	24.5	15	28.3		
Psychotic characteristic	Yes	36	73.5	34	64.2	1.02	.311
	No	13	26.5	19	35.8		
PTSD	Yes	30	73.2	15	32.6	14.28	.000****
	No	11	26.8	31	67.4		
Suicide attempt	Yes	33	67.3	26	49.1	3.49	.062
	No	16	32.7	27	50.9		
Number of hospitalization	1	22	44.9	12	22.6	7.26	.026*
	2	9	18.4	8	15.1		
	3 and more	18	63.7	33	62.3		

****In the group whose social relations had been restricted, posttraumatic stress disorder was found more frequently and this result is statistically significant.

*The number of hospitalizations is lower in the group whose social relations had been restricted and this result is statistically significant.

There are studies accepting that the diagnosis of posttraumatic stress disorder can be reliably made in individuals with a diagnosis of severe psychiatric disease (18). In these studies, it was found that the degree of PTSD symptoms were related with the degree of traumatic experience as in the general population (19). Twelve of the patients who participated in our study reported that they had been exposed to violence in some period of their lifetimes. It was found that most of the patients (n=73, 71%) had been exposed to violence before the disease onset and a small portion of the patients (n=17) were exposed to violence after the disease was diagnosed. In the study of Turan et al. (20) which was conducted in 2000 with female patients who presented to the outpatient clinic with a diagnosis of mood disorder, anxiety and somatoform disorder, it was found that 36.3% of the patients had been exposed to physical and/or verbal violence before the disease onset and 40.5% were exposed to physical and/or verbal violence throughout the disease period. The fact that the rates we found in our study were higher compared to the study of Turan et al. may be related with inclusion of the individuals with severe psychiatric disease into our sample group. There are few studies related with the temporal relation of exposure to trauma with the disease onset; studies related with childhood trauma and psychopathology indicate that trauma starts before the disease (21).

Seventy-nine patients (77.5%) included in our study had been exposed to verbal violence; 71 patients (69.6%) were found to have been exposed to physical violence in some period of their lifetimes. 42 patients (41.2%) were victims of sexual violence. 52 patients (51%) had been exposed to economical violence. 49 patients (48%) had been exposed to violence restricting social relations. A total of 77 patients (75.5%) had been exposed

to physical or sexual violence in some period of their lifetimes. According to the results of TUIK (the Turkish Statistics Institution), 43.9% of the women living in Turkey are subjected to emotional violence by their husbands or the partners they live together, 39.3% are subjected to physical violence, 15.3% are subjected to sexual violence, 23.4% are subjected to economical violence and the rate of violence controlling and restricting social relations directed to the wife may reach up to 68.8%. The results of our study are higher in terms of physical, sexual, verbal and economical violence. The rate of exposure to trauma is expected to be higher in individuals with severe psychiatric disease compared to the general population (22).

In the review article of Read et al. (12) published in 2005, the studies examining the rates of exposure to physical or sexual violence in the childhood in psychiatric patients were addressed. It was reported that the rate of exposure to physical or sexual violence ranged between 48% and 92%. In our study, the rate of exposure to physical or sexual violence in a lifetime was found to be 75.5% (n=77) and thus it is in the range reported by the previous studies. This result is similar to the result of the study of Cohen et al. (23) conducted in 1996 with adolescent inpatients. In our study, 36 patients (35.3%) were found to have been exposed to both physical and sexual violence and 77 patients (75.5%) were found to have been exposed to physical or sexual violence. This findings are similar to the findings of the study of Jacobson and Richardson (24). Jacobson and Richardson found that 64% of the female inpatients had been exposed to physical violence, 38% had been exposed to sexual violence and the individuals who were exposed to physical or sexual violence constituted 81% of the whole sample. When the studies conducted in this area in our country were examined, it was found that 36%

of the women who presented to psychiatry outpatient clinics reported that they had been exposed to emotional violence, 29.3% reported that they had been exposed to verbal violence, 32% reported that they had been exposed to economical violence, 57% reported that they had been exposed to physical violence and 30.7% reported that they had been exposed to sexual violence in the study of Akyüz et al. (14) dated 2002. The results we found in our study were higher compared to the results of Akyüz et al. This may be related with the fact that our study included an inpatient population.

Exposure to physical and sexual violence is a traumatic experience and its association with PTSD is an expected finding. In our study, other factors which might cause to development of PTSD were found in individuals exposed to traumatic experiences: a statistically significant difference was found between the individuals who had been and had not been exposed to emotional-verbal violence, economical violence and violence restricting social relations in terms of development of PTSD. Association of emotional-verbal violence, economical violence and violence restricting social relations with PTSD may be related with their accompaniment to other types of violence. These results may indicate to the protective function of social support systems preventing development of PTSD. Inhibition of supportive relations may increase the possibility of development of PTSD. These results emphasize the importance of investigating other types of violence (25) in addition to physical-sexual violence in studies of domestic violence in terms of defining factors related with PTSD. In the study of Gökalp et al. (26) conducted in 1999, the rate of PTSD was found to be 55% in female patients who presented to the psychiatry outpatient clinic and reported that they had been subjected to violence by their husbands. In contrast to Gökalp et al., we found higher rates in our study. This difference may be related with the fact that exposure to sexual violence was also investigated as a traumatic experience as well as physical violence and the rate of exposure to other types of violence was high.

Fifty-five (76%) of 72 patients found to have psychotic findings reported that they had been exposed to physical or sexual violence. This rate is lower compared to the rate (94%) found in the study of Kilcommons and Morrison (19) conducted with 32 patients who had only a diagnosis of psychotic disorder. The fact that patients with mood disorders with psychotic character were included in our study may explain the difference. In our study, the number of the patients who had psychotic characteristics was found to be higher compared to the patients who had no psychotic characteristics in the patient group who had been exposed any one of the violence types including physical violence, sexual violence, verbal violence, economical violence and violence restricting social relations. However, no significant correlation was found between any type of violence and having psychotic characteristics. In a group psychotherapy study conducted by Sezgin (28) with women who had traumatic experience, the rate of suicide attempt was reported to be 1/3. In the study of Gökalp et al. (26) conducted with women who had been exposed to violence, the rate of suicide attempt was found to be 47%. In the study of Berg-

man and Bismar (29) conducted in 1991, the rate of suicide attempt was found to be 15% in women who had been exposed to violence and this rate was higher compared to the control group who had not been exposed to violence.

In our study, the rate of suicide attempt was found to be statistically significantly high in the individuals who had been exposed to verbal violence; this result was compatible with the study of Houry et al. (27) in which physical, sexual and emotional-verbal violence were investigated. Houry et al. demonstrated that all three types of violence were associated with symptoms of psychological disease, PTSD and suicide attempt.

Although the frequency of hospitalization was found to be high in the patients who had been exposed to physical and sexual violence, this result was not statistically significant. In a study conducted by Rosenberg et al. (18) with patients diagnosed with schizophrenia, a correlation was found between the frequency of hospitalization and abuse during the childhood. In the 5-year follow-up study of Bergman et al. (29), it was reported that women who had been exposed to violence were hospitalized more frequently compared to the control group. The frequency of repeated hospitalizations was found to be significantly low in the patients who had been exposed to violence restricting social relations. Violence restricting social relations has not been investigated adequately in the literature. This difference suggests that these patients whose social relations are restricted and who are forbidden to go out of home and to see their families and friends may be restrained from reaching healthcare systems.

There are difficulties for women who are exposed to domestic violence in reaching healthcare services and reporting the situations (30). Ninety (88.2%) of 102 patients included in our study reported that they had not talked about domestic violence with their physicians before. In the study of Currier et al. (31) conducted with 145 individuals who were residents in psychiatry in four medical faculties in USA, only 28 participants stated that they had received education in this area and the ones who received education in this area found exposure to violence in a much more higher number of cases. Education directed to clinicians is required for accurate and timely diagnosis and treatment of cases of domestic violence which are encountered frequently in clinical practice, but mostly not defined. The results obtained in our study showed that the frequency of verbal, economical, physical and sexual violence was higher in female inpatients compared to the ones who presented to the outpatient clinic. The higher rates we found in our study may be related with the fact that it was easier for the patients to state the violence they had been exposed to in the hospital environment where they had been moved away from the environment of violence.

The fact that different types of violence have been investigated in various studies investigating domestic violence in women with psychiatric disease makes it difficult to evaluate these studies comparatively. There is no structured scale used in these studies. However, considering the fact that one third of women exposed to violence in the population sample did not report the subject to healthcare workers, the necessity of providing data related with the subject using a semi-structured

scale to be used in clinical interview is clear (32). The sample size should be increased to investigate the effect of domestic violence on clinical course in different psychological diseases and to demonstrate the temporal relationship of domestic violence with the disease onset. The low number of our sample is one of the limitations of our study.

In our study, exposure to verbal violence was found to be correlated with suicide. Not only physical and sexual violence, but all types of violence were found to be associated with a co-diagnosis of PTSD in conditions where exposure to trauma was present as determined by DSM-IV-TR. No significant correlation could be demonstrated between psychotic characteristics and exposure to violence. When the frequency of hospitalization was examined, it was observed that the women who had been exposed to violence restricting social relations were hospitalized less frequently; this finding suggested that these women were also restrained from reaching healthcare systems. Further studies interrogating all types of violence in the patient groups with severe psychological diseases who have the possibility to experience disability in the course of their diseases and thus have an increased risk in terms of exposure to violence are needed.

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Supp.: Domestic Violence Inventory

Questions about domestic violence you might have survived are listed below.

- A) Please mark the perpetrator/s if you experienced violence. You might mark more than one from the list below.
- 1) Spouse
 - 2) Father of the spouse
 - 3) Mother of the spouse
 - 4) Siblings of the spouse
 - 5) Your father
 - 6) Your mother
 - 7) Your siblings
 - 8) Second degree relatives of the spouse (i.e.: uncle, aunt, cousin...)
 - 9) Your second degree relatives (i.e.: uncle, aunt, cousin...)
 - 10) A stranger
 - 11) Other (i.e.: neighbour)
- B) For how long have you been exposed to violence
- C) Please report the frequency of the violence during the last year or during the period you were exposed to, if the violence is stopped.
- 1) Once during last year
 - 2) Twice during last year
 - 3) 3-5 times during last year
 - 4) 6-10 times during last year
 - 5) 10-20 times during last year
 - 6) 20-50 times during last year
 - 7) More than 50 times during last year (every week or more often)
- D) What was your response when you were exposed to violence? You may report more than one option.
- 1) No response
 - 2) Verbally reaction
 - 3) Asked for help from my family
 - 4) Asked for help from neighbours
 - 5) I ran off
 - 6) I reported to policeman
 - 7) I applied to a health institution (a hospital a healthcare unit)
 - 8) I was offended, I didn't talk
 - 9) I replied with violence
 - 10) Other (please report)
- E) Were you exposed to violence during your pregnancy. If yes please report the type of violence.
- 1) Physical violence
 - 2) Verbal-emotional violence
 - 3) Sexual violence
 - 4) Economic
 - 5) Constraints on social relationship
- F) Did you mention to a doctor or a psychiatrist about being exposed to violence
- Yes
- No
- G) Did you witness domestic violence among your parents during your childhood. Please report the type of violence if your answer is yes.
-

Were you...	The perpetrator	Duration	Frequency	Your response
1) Physical violence				
Were you slapped	-----			
Pushed	-----			
Stroke with a fist	-----			
kicked	-----			
Hit with a hard object	-----			
Injured by a weapon (a knife or a gun)	-----			
Burned	-----			
Drown	-----			
Other (report)	-----			

Were you...	The perpetrator	Duration	Frequency	Your response
2) Verbal-emotional Violence				
Were you shouted at	-----	-----	-----	-----
Called with humiliating names	-----	-----	-----	-----
Often criticised	-----	-----	-----	-----
Scolded severely	-----	-----	-----	-----
Humiliated or shamed in front of others	-----	-----	-----	-----
Cursed at	-----	-----	-----	-----
Compared with others	-----	-----	-----	-----
Denigrated	-----	-----	-----	-----
Asked for more than you are able to do	-----	-----	-----	-----
Banned about your own decisions	-----	-----	-----	-----
Deprived of love and respect	-----	-----	-----	-----
Threatened	-----	-----	-----	-----
Other (please report)	-----	-----	-----	-----

Were you...	The perpetrator	Duration	Frequency	Your response
3) Sexual Violence				
Were you forced to sexual violence	-----	-----	-----	-----
exposed to sexual harassment raped	-----	-----	-----	-----
Forced to sexual relation with other	-----	-----	-----	-----
Harmed at your genitalia	-----	-----	-----	-----
Treated as a sexual object	-----	-----	-----	-----
Forced for pregnancy	-----	-----	-----	-----
Other (please report)	-----	-----	-----	-----

Were you...	The perpetrator	Duration	Frequency	Your response
4) Economical Violence				
Were you banned from working	-----	-----	-----	-----
Were you forced to work	-----	-----	-----	-----
Taken under control of your salary	-----	-----	-----	-----
Constrained about your main/basic needs	-----	-----	-----	-----
Neglected on your household needs	-----	-----	-----	-----
Threatened by control of money	-----	-----	-----	-----
Other (please report)	-----	-----	-----	-----

Were you...	The perpetrator	Duration	Frequency	Your response
5) Constraints on social relations				
Were you forbidden to meet your family, friends or neighbours	-----	-----	-----	-----
Interfered your private life	-----	-----	-----	-----
Controlled about your telephone calls stalked	-----	-----	-----	-----
Oppressed via alleging customs or honor	-----	-----	-----	-----
Other (please report)	-----	-----	-----	-----