Original Article

Examining the Possibility of Violence in a University Hospital Psychiatric Clinic

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Abstract
Aim: This study was conducted to make an assessment of the possibility of violence in patients hospitalized in the psychiatric clinic of a university hospital.
Method: The study was conducted as a descriptive study using sociodemographic data form and the Broset Violence Checklist (BVC) with psychiatric patients in a psychiatric clinic. This study was performed between September 2020 and December 2021 using 142 psychiatric patients in a psychiatric ward in eastern Turkey.
Results: There was a difference among the patients' BVC mean scores, which were measuredat four different times. The time spent in the clinic was effective in reducing the risk of violence in the patients (%79.2). It was determined that medical diagnoses and time affected the risk of violence by 15.6%. It was observed that the risk of violence was highest in patients with bipolar than in all patient groups. It was determined that the time spent in the clinic and the patients' medical diagnoses affected the risk of violence.
Conclusion: The result of this research reveals the existence of a risk of violence in psychiatric clinics.

Keywords: Psychiatric clinic, inpatient, risk of violence.

Introduction

Violence is a multifaceted phenomenon that has been frequently discussed in recent years and is related to the thoughts, attitudes, and behaviors that threaten the health of the individual and society (D'Ettore & Pellicani,2017). Violence is one of the most, if not the most, importantof the problematic behaviors that can be seen in people with mental illness (Varshney et al., 2016). It has been suggested that the rate of violence in psychiatric treatment settings is twice as high as in other medical settings (Cheng at all., 2017; Olashore et al., 2018). For this reason, there hasbeen an increase in studies examining violence in inpatient psychiatric patients (Ata, 2012; Kelleci and Hvidhjelm et al., 2016; Kocabıyık et al., 2015; Moursel and Cetinkaya, 2019).

Violence by psychiatric patients endangers the safety of patients, their families, and healthcare professionals (Hvidhjelm et al., 2016; Stewart et al., 2013). Many studies of employees subjected to violence by psychiatric patients have reported numerous negative effects on the employees' health and professional attitude toward patients (Bizzari et al., 2020; Hassankhani and Soheili, 2017; Hoyle et al., 2018; Mitra et al., 2018). The sudden unpredictability of violent behavior occurring in patients is an important stress factor in psychiouratric clinics (Sim et al., 2020). Aggression is a significant problem in patients with mental illness and progresses

without intervention (Anderson and Jenson 2019). The violent behavior of the patients disrupts the therapeutic environment, creates anger, provokes other patients, demoralizes employees, and causes injuries and sometimes fatalities (Maria et al., 2015). Violent behavior results in economic losses and negatively impacts patient–staff communication, the quality of health care, and the quality of life of the employees (Lim et al., 2018;Richard- Devantoy et al., 2009). After an attack, symptoms appear in patients and healthcare workers that include an increased startleresponse, body tension, and change in sleep patterns (Kocabıyık et al., 2015).

Although violence is common throughout society, people with psychiatric disorders have higher aggression potential (Karaazis et al., 2015; Kerr et al., 2017; Price et al., 2015)According to a study conducted on nurses working in a large mental health center in Israel, 88.1% of the nurses were subjected to verbal violence, and 58.4% were subjected to physical violence by patients in the previous year (Itzhaki et al., 2015). The research findings of a study in regional psychiatric hospitals in Turkey by Kocabiyik et al. showed that 73% of healthcare workers were exposed to violence in the workplace, with 51.1% of nurses exposed to physical violence, 51.1% to verbal violence, and 87.2% to violence committed by patients (Kocabiyik et al., 2015).

The most effective strategy for minimizing the risk of violence against patients and employees in psychiatric clinics is to develop preventive treatment strategies based on an assessment of the risk of violence (Ramacciati et al., 2016;Viljoen at al., 2018). Studies investigating the risk of violence in patients in psychiatric clinics are limited (Barlati et al. 2019,; Bilici et al., 2013; Kelleci and Ata, 2012; Moursel and Cetinkaya, 2019).

Today, the violent behavior of patients in psychiatry clinics is a problem that needs to be prioritized and then effectively managed. In this study, patients were evaluated in terms of potential aggression before the emergence of violent behavior occurs. In this respect, this study is the first study to evaluate the risk of violence in a psychiatry clinic in Turkey.

Method

Aim and Design of the Study

This study was conducted to make an assessment of the possibility of violence in the psychiatric clinic of a university hospital.

Research questions: Patients receiving inpatient treatment in the psychiatric clinic;

• Do risks of violence differ depending on time spent in the clinic?

• Is there a relationship between risks of violence according to sociodemographic characteristics?

• Is there a relationship between disease diagnoses and risk of violence?

Setting and Participants: This research was carried out with inpatient psychiatric patients in the psychiatry clinic of a university hospital located in eastern Turkey. The population of the study comprised patients hospitalized in the psychiatry clinic between between September 2020 and December 2021. The study's sample consisted of 142 of these psychiatric patients who agreed to participate in the study, who were over the age of 18, and who could be observed on the day of admission to the clinicand for three days afterwards.

The data were collected through researcher in the psychiatric clinic. Before starting data collection, meetings were held with clinical staffs in which information was provided to them about the purpose of the study and the measurement tools to be used. While collecting data, clinic visits were made by the researcher every day. The patient was observed for four days, including the day of admission. Research datawere collected using a personal information form and the Broset Violence Checklist (BVC).

Data Collection Tools

Personal Information Form: This form was designed to obtain the socio-demographic characteristics (age, gender, marital status, medical diagnosis, etc.) of the patients.

Broset Violence Checklist (BVC): The BVC is a short checklist developed for inpatient psychiatric patients that is used in acute psychiatric clinics to estimate violence over a 24-hour period . It is considered a fast, easy-to-use tool that can predict violent behavior and can be easily integrated into daily practice in the clinic. Beyond clinical evaluation, it only requires behavioral observation (Almik

et al., 2000). It was developed from empirical studies by Lınaker and Busch-Iversen and was cited in an article by BVC Almvik et al. (Edlinger et al., 2014; Linaker and Busch Iversen 1995). Turkish validity and reliability were tested by Moursel and Dumankaya (Moursel and Cetinkaya, 2019). They created a six-item BVC comprising three patient characteristics (irritability, confusion, and explosiveness) and three patient behaviors (assault on objects, physical threats, and verbal threats) to predict violence over a 24-hour period. The BVC application is filled out by a nurse who evaluates patients' behaviors based on his or her own observations. In the Turkish validity and reliability study, the item-total Cohen κ coefficient of the checklist was 0.93. In this study, it was 0.90.

Statistical Analysis: Data analysis was performed using the SPSS 23.0 package program (SPSS Inc., Chicago, IL, USA). Kolmogorov Smirnow and Shapiro-Wilk's test was used to determine whether the data were normally distributed. Descriptive analysis, minimum-maximum values percentage, mean and standard deviation, frequency and repeated measures analysis ANOVA were used in data analysis. Statistical significance of the data was evaluated at the $p < 0.05$ level.

Ethical Consideration: Before the study, permission was obtained from the author who made the validity and reliability of the scale. Then, written permissions were obtained from Ataturk University Faculty of Nursing Ethics Committee (Approval Number:2020-4/18) and the hospital where the study was conducted. The purpose of the study was explained to the patients who were included in the study sample, who were able to evaluate the reality and who agreed to participate in the study, and a form of consent was obtained. The consents of the patients who were not able to evaluate the reality were obtained from their first-degree relatives after the purpose of the study was explained.

Results

In the study conducted with 142 patients, 35.9% of the patients were between the ages of 31-45, 54.9% were female, 51.4% were single, and 77.5%did not work. It was found that 50% of the participants had schizophrenia, 24.6% were bipolar, and 25.4% were other psychiatric disorders (depression, ocb, substance addiction, anxiety disorder, dissociative disorder) (Table 1). There was a difference between the BVC values measured at four different times of the patients (Figure 1). The time spent in the clinic was effective in reducing the risk of violence in the patients ($F = 176.114$, $\eta 2 = .792$, $p < .001$). It was found that the mean BVC scores of the participants on the admitted day was 2.48±1.27, the first day was 1.77±1.10, the second day was 1.22±0.99 and the third day was 0.75±0.68. The impact rate was 79.2%. There was significant difference between the patients' medical diagnosis with BVC mean score (Figure 2). It was found that medical diagnosis affected the risk of violence by 15.6% ($F = 3.690$, $\eta 2 = 0.156$, $p < .001$) (Table 3). In the Post Hoc test (Tamhane's T2), there was a difference between schizophrenia, bipolar and other psychiatric disorders (depression, ocb, substance addiction, anxiety disorder, dissociative disorder). In other words, the risk of violence of patients with other psychiatric disorders were lower than that of all patient groups; the risk of violence of patients with bipolar psychiatric disorders were higher than that of all patient groups. According to these results, the BVC mean scores were significantly influenced by medical diagnosis (Table 3).

Discussion

This study was conducted to evaluate the risk of violence among a group of patients hospitalized in a psychiatric clinic. It was concluded that there was a difference between the BVC values measured at four different times and that the time spent in the clinic reduced the risk of violence. It was determined that the time spent in the clinic had a significant effect on the risk of violence. The risk of violence on first day the patients were admitted to the clinic were observed. The violent behavior gradually decreased. It is important to recognize the risk of violence upon admission to the clinic. Violent behavior is frequently reported in hospitalized patients in acute condition (Aras, 2014). Patients are involuntarily hospitalized, and the emotions surrounding physical restraint, the feeling of being under threat, and the lack of trust

resulting from a change in environment are experienced more intensely in the first days of hospitalization. Intensive psychotropic drug administration after hospitalization and taking measures to prevent violence may be effective in this result.

Table 1. Demographic status of patients (N=142)

Demographic Data	n	%
Age		
18-30	43	30.3
31-45	51	35.9
45-78	48	33.8
Gender		
Male	64	45.1
Female	78	54.9
Marital Status		
Married	69	48.6
Single	73	51.4
Working Status		
Work	32	22.5
Not work	110	77.5
Psychiatric Disorder		
Schizophrenia	71	50.0
Bipolar	35	24.6
Depression and personality disorders	36	25.4

Figure 1. BVC values of patients measured at four different times

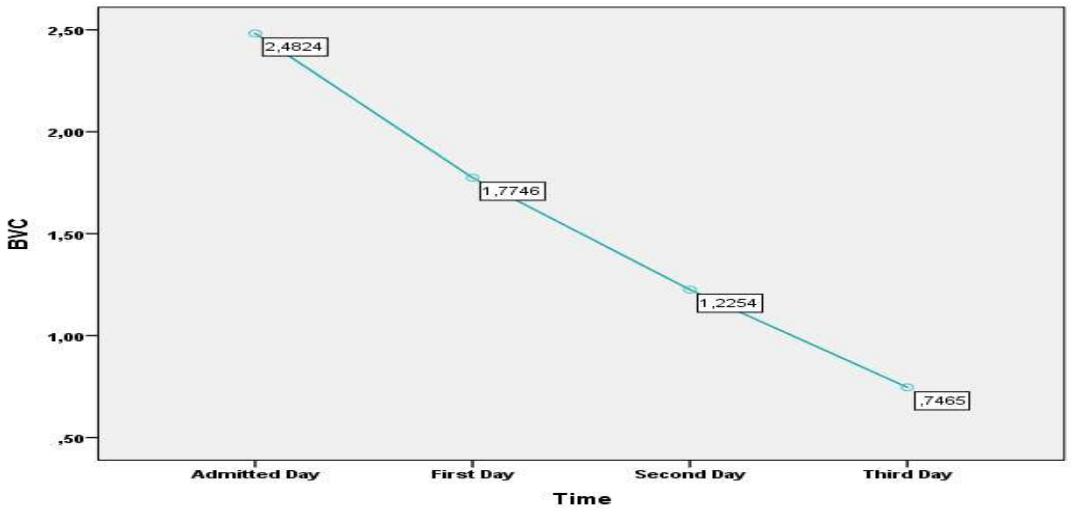

Table 2. Interaction between patients' BVC mean scores and time with ANOVA in repeated measures

Time	Mean±sd	Within-Subjects Effects		
		F	η2	p
Admitted Day	2.48±1.27			
First Day	1.77±1.10			
Second Day	1.22±0.99	176.114*	0.792	<0.001
Third Day	0.75±0.68			

Figure 2. BVC values of patients medical diagnosis measured at four different times

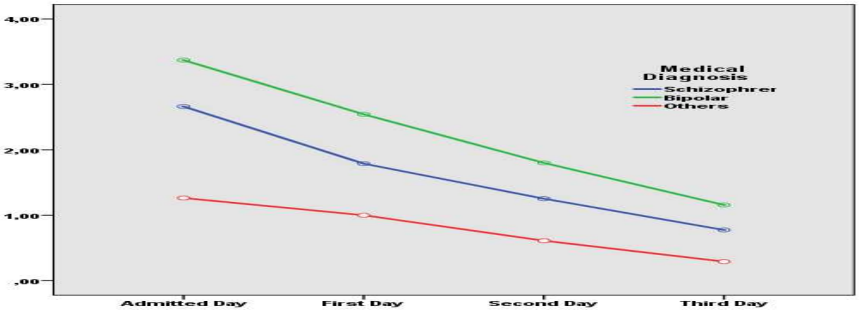

Table 3. Interaction between patients' BVC mean scores and time with Psychiatric Disorder

Time	Psychiatric Disorder			Between-Subject Effects (Time* Psychiatric Disorder)		
	Schizophrenia	Bipolar	Other			
	Ort ±ss			F	η2	p
Admitted Day	2.66±0.12	3.37±0.17	1.26±0.17			
First Day	1.78±0.11	2.54±0.16	1.00±0.16	3.690*	0.156	<0.001
Second Day	1.25±0.10	1.80±0.15	0.61±0.15			
Third Day	0.75±0.07	1.15±0.10	0.29±0.10			

Aggression is more common in psychiatric clinics than in other clinics (Price et al., 2015). When national and international literature on the risk of violence and aggression is examined, it is found that psychiatric patients show a higher risk of violence than the general population. It is observed that the aggressive behavior seen in psychiatric clinics endangers the safety of both patients and healthcare professionals (Aras 2014; Karaaziz et al., 2015; Kelleci and Ata 2012; Stewart et al., 2013;). A study conducted by Elvan and Kelleci found that most patients hospitalized in a psychiatric clinic show a high level of aggression (Elvan and Kelleci, 2012). A study conducted by Moursel and Dumankaya on the day the patients were admitted to the clinic found that the risk of violence was high but decreased afterwards. The results of the studies are consistent with the findings of this study (Moursel and Dumankaya, 2019). Another study, conducted by Ata and Kelleci to determine the potential aggression of a group of patients hospitalized in a psychiatric clinic, found that 58.6% of the patients showed a high likelihood of aggression (Kelleci and Ata 2012). Studies of violent behavior in psychiatric clinics have clearly shown different results. These differences may be the result of the studies being conducted in different cultures using different measurement tools.

The important issue that draws attention in this finding is that working mental patients with high potential for violence poses a risk in the society. Risk assessment plays a key role in preventing or reducing violent behavior (Van Der Veeken et al., 2018). Therefore, early diagnosis, correct treatment can prevent violence by increasing social acceptability in the society.

In the study, a significant difference was found between the medical diagnosis of patients and BVC values. It was concluded that medical diagnosis affected the risk of violence by 15.6%, and that the risk of violence was lower in patients with other psychiatric disorders (ocb, substance addiction, anxiety disorder, dissociative disorder) than in all patient groups, and the risk of violence was highest in bipolar patients. Although violent behavior is low in most psychiatric diseases, it has been reported that the risk of violent behavior increases especially in those with serious psychiatric diseases such as schizophrenia and bipolar disorder (Volavka,2013). In a study comparing individuals diagnosedwith bipolar disorder, individuals with other mental illnesses and healthy individuals, it was found that individuals with bipolar disorder have a higher level of aggression than other groups (Ballester et al., 2012). Although aggressive behaviors often occur during manic periods in bipolar disorder, they are more common in euthymic patients. Concomitant factors such as borderline personality disorder, antisocial personality disorder, and substance use disorders also increase the risk of violent behavior (Giordano et al., 2017). It has been stated that aggression inindividuals diagnosed with bipolar disorder is associated with irritability, impatience and lack of insight (Volavka,2013). In the study of Gulec et al. examining impulsivity and aggression in bipolar disorder, it was stated that the level of aggression in bipolar disorder was higher than the healthy control group. Epidemiological studies have shown that lifelong aggression levels of bipolar disorder patients are well above the population average, and it has been stated that this risk increases even more when there is a comorbid personality disorder or substance use (Gulec et al., 2009). Considering the relationship between bipolar disorder and violence, it can be interpreted that violent behavior in the acute manic period is impulsive and does not contain a specific goal, and patients may turn to violence, especially when limited in a manic episode. In a study conducted, it was concluded that paranoid delusional thoughts, agitation, irritability and impulsive behaviors and auditory hallucinations) were the factors that push patients to crime (Assareh et al., 2016). In the study conducted by Pinna et al., results parallel to the study findings were obtained. Recent studies have found that the patient is male and young, single, having a history of previous harm to himself or his environment and impulsivity, compulsory hospitalization and an increased risk of crime in individuals with psychotic disease (Pinna et al., 2016). Although this risk increase is moderate, it is statistically significant

(Asikainen et al., 2020; Dickens et al., 2013; Iozzino et al.,2015; Olupona et al., 2017). As a result of this research, it is seen that the majority of the patients are young, have bipolar and schizophrenia diseases. These results suggest that violentbehavior may be associated with psychotic symptoms, as part of the disorganized or agitated behavior in the patient or due to the nature of the hallucinations with the delusional system.

Conclusions and limitations: As a result of the study, it was observed that time and time with medical diagnosis has a high effect on the risk of violence. It was determined that the risk of violence was highest in patients with a diagnosis of bipolar. It has been concluded that hospitaliotherzation in patients at risk of violence significantly reduces the risk of violence. In future studies, the risks of violence can be revealed in more detail by conducting in-depth examinations in larger samples and certain diagnostic groups. Aggression is a major issue among psychiatric inpatient units, with both nurses and fellow patients being victimized.

In this study, violent behavior was observed in patients admitted to a psychiatric clinic for the first three months from the day they were admitted, but the factors that led to violent behavior were not examined in detail. No study was conducted in Turkey using the measurement tool used in the research. Moreover, the evaluation of the research results according to a clinic limits the limitations of this study. constitutes.

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