

Profile of Population Targeted by Violent Behavior of Psychotic Patients



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SUMMARY

Objective: The aim of this study is to examine the population targeted by the violent behavior of psychotic patients and to provide data on the treatment and therapeutic support of psychiatric professionals based on our results.

Method: Eighty-one psychotic patients lacking criminal responsibility and under observation or mandatory treatment due to violent crime were compared with a control group of 31 persons with criminal responsibility. The sociodemographic features of the two groups' victims and descriptive data about the crimes and the target populations were examined and analyzed with SPSS 11.

Results: Patient and control groups were compared according to their relationships to their victims. Of psychotic patients' victims, 36.9% percent were family members, while in the non-psychotic group the proportion was 10%, a statistically significant difference ($p<0.01$). We also found a statistically significant difference between the two groups in the mean ages of their victims and in the proportions who victimized married people, had previously met with their victims or who lived with their victims prior to the homicidal act.

Conclusion: This study concludes that violent psychotic patients mostly choose their victims from among their family members. Psychotic patients were three times more likely to choose a relative compared to the control group. Recognizing the risk factors and the population most often targeted by homicidal behavior is essential for protecting patients and the community.

Key words: Psychotic disorders, violence, crime victims

INTRODUCTION

In 1983, Monahan and Steadman suggested that there was no increased risk of violence in patients with schizophrenia or other psychotic disorders. However, studies based on large samples published in the last 20 years have proposed a moderate correlation between schizophrenia and other psychotic disorders and violence (Kooyman et al. 2007). This opinion is not supported by many clinicians in the field of mental health (Van Dorn et al. 2005). Several studies have found that the aggressive behavior of individuals with serious mental illnesses was associated with an increased probability of past exposure to assault; these studies emphasized the mutual, two-way

dimension of violence (Walsh et al. 2003, Silver et al. 2005, Hodgins et al 2007).

There is a need for reliable data to appropriately direct the social perception of the relationship between mental illnesses and dangerous behavior (Pescosolido et al. 1999, Torrey 2002) and to prevent individuals with mental illnesses from unwanted stigma (Penn et al. 1999, Corrigan et al. 2004).

Multivariate analysis indicated that having a serious mental illness alone was not sufficient to predict future violent behavior (Elbogen and Johnson, 2009). Personal history (past violence, physical abuse, detention as a youth), clinical factors (substance abuse, perceived threat), demographic factors (age,

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gender, income), and social factors (recently divorced, unemployment, victimization) were associated with the prediction of potential violent behavior. However, most of these factors were found more frequently in individuals with serious mental illnesses (Elbogen and Johnson, 2009). A meta-analysis reviewing 20 separate studies including 18,423 subjects found that homicidal risk was higher in individuals with psychotic disorders than in control individuals, among the general population. However, in the same meta-analysis, it was found that substance use co-morbidity significantly increased homicidal risk. The risk for psychotic patients and non-psychotic subjects with substance use co-morbidity was similar. In other words, schizophrenia and other psychoses have no contribution to risk with substance abuse alone (Fazel et al. 2009).

Visual and printed media have a tendency to depict mental health patients as randomly violent towards unfamiliar objects or strangers. In general, studies on psychiatric patients do not support this characterization, even in studies including several serious and homicidal cases (Johnston and Taylor. 2003).

While the relationship between mental disorders and violence has been more extensively covered in international studies in recent years, research of related publications and trials revealed insufficient coverage in our country. Social perception of the relationship between mental disorders and violence is ambiguous, multi-dimensional, and affected by the mental health policies in force during a given time period, the media, cultural factors, and the educational level of the society.

Although the determination of dangerousness and criminal tendency is an important topic in clinical psychiatry, determining the individuals most targeted by the violent behavior of mental health patients and educating those people and society about necessary precautionary measures has attracted more attention.

The purpose of this study is to provide information about treatment and therapeutic support for potentially violent behavior patterns of psychotic patients. Thus, we aim to provide evidence-based data to mental health workers who are expected to inform and protect patients and caregivers by the society.

METHOD

In this study, 112 forensic psychiatry subjects who were under observation or protection due to a crime of violence and receiving treatment at Bakirkoy Psychiatric and Neurological Diseases Training and Research Hospital in 2006 were included. Criminal cases were divided into two groups according to the presence or absence of criminal liability as established by commitment based on psychiatric evaluation. The first group included psychotic patients with schizophrenia, undifferentiated type psychotic disorder or delusional disorder and without criminal liability (81). The second control group included

patients with personality disorder or substance/alcohol abuse and criminal liability (31). Patients were diagnosed according to the DSM-IV diagnosis criteria by at least two psychiatrists within a period of three weeks on average. The diagnoses were confirmed by a medical board consisting of five psychiatrists.

Assuming that the demographic characteristics of the assailants and victims could be determinants of the target victim profile of psychotic patients, the first group's characteristics were compared with those of the control group by examining descriptive information about the target population for the violent crime. Since some cases had more than one victim, additional victims were also considered, but unclear or missing target population data were not taken into account. Mood disorders, disorders related to alcohol or substance use, and cognitive disorders, such as dementia, mental retardation and amnesic disorder, were excluded even if they do not require criminal liability. Patients who were not capable of verbal communication due to psychopathology or language problems were also excluded. Only patients or subjects who provided consent were included in the study. Results were discussed based on relevant publications and hypotheses.

In this study, the SPSS 11 (Statistical Package for Social Science) statistical package was used. Data were evaluated by parametric and non-parametric statistical analyses. Student's t-tests were used for quantitative evaluations. Chi-square tests were performed for qualitative evaluations.

RESULTS

Since the number of inpatient women during the study period was insufficient to provide statistical data, the study included only male patients. The 81 psychotic patients included in the study were diagnosed with schizophrenia (52 patients), delusional disorder (20 patients) and undifferentiated type psychotic disorder (9 patients).

The mean age of the patient group during the study (39.21 years) and at the time of crime (35.87 years) was higher than for the control group (30.58 years and 28.26 years, respectively). A statistically highly significant ($p < 0.001$) difference was found between these values for the two groups (Table 1). The mean age of the target population was 43.32 years for the psychotic patient group and 35.74 years for the control group; the difference was statistically highly significant ($p < 0.01$) (Table 1). Neither the mean duration of education nor the mean number of victims were significant differently different for the two groups ($p > 0.05$) (Table 1). In the psychotic group, 72 (69.3%) subjects had 1 victim, 13 (25%) subjects had 2, and 2 (5.7%) subjects had 3 victims. In the control group, 26 (83.9%) subjects had 1, 4 (12.9%) subjects had 2, and 1 (3.2%) subject had 6 victims.

The target population was predominately male for both

Table 1. Age, education duration (in years), age during the crime, number of victims, and mean age of victims in patient and control groups

	Patient Mean $\pm$ SD)	Control Mean $\pm$ SD)	t	p
Age of assailant	39.21 $\pm$ 10.71(81)	30.58 $\pm$ 11.95(31)	3.698	0.001**
Education duration of assailant	8.16 $\pm$ 4.27(81)	7.16 $\pm$ 3.44(31)	0.247	0.24
Age of assailant during the crime	35.87 $\pm$ 10.66(81)	28.26 $\pm$ 11.26(31)	3.333	0.001**
Number of victims	1.21 $\pm$ 0.49(81)	1.29 $\pm$ 0.93(31)	-0.612	0.54
Mean age of victims ¹	43.32 $\pm$ 15.24(104)	35.74 $\pm$ 16.20(40)	2.579	0.01*

t: Student's t test; p>0.05: non significant; *p<0.01: Highly significant, **p<0.001: Very high significance, ¹In some cases the number of victims is more than one for a given assailant.

groups, and no statistically significant difference was found between the percentages of male victims (p>0.05) (Table 2). Of the victims, 66% and 41.7% were married in the patient group and the control group, respectively; the difference was highly significant (p<0.01) (Table 2). Ninety-four percent of the patients' victims knew the assailant versus 80% of the control group victims; the difference between the two groups was statistically significant (p<0.05) (Table 2). Of the patients' victims, 38.6% lived with their assailant at the time of the crime versus a rate of 9.7% in the control group; 44.7% and 25% had been previously attacked by their assailant in the patient or control groups, respectively. The differences were statistically significant (p<0.01 and p<0.05, respectively)

(Table 2). The patient group targeted a first degree relative or family member, such as a spouse, with a rate of 35.6% versus 10% in the control group. Furthermore, the rate of choosing unknown victims was significantly higher in the control group compared to the patient group (20% versus 7.7%, respectively; p<0.01) (Table 2).

In terms of the crime scene, 57.5% of the crimes of the patient group were committed in a private house or public area, while 74.2% of the crimes of the control group were committed in a workplace, entertainment venue or private non-residential areas. The difference was statistically highly significant (p<0.001) (Table 2).

Table 2. Target population gender, marital status, and relation to the assailant, as well as, whether the assailant was known by the target prior to the crime, whether they lived together, previous attacks, and the location of the crime.

	Patient group		Control group		Total		X ²	sd	p
	S	%	S	%	S	%			
Gender									
Male	63	60.6	30	75	93	64.6	2.03	1	0.12
Female	41	39.4	10	25	51	35.4			
Marital status ¹									
Single, Divorced, Widow	33	34	21	58.3	54	40.6	5.46	1	0.01**
Married	64	66	15	41.7	79	59.4			
Relation									
First-degree relative, spouse	37	35.6	4	10	41	28.5	11.4	2	0.003**
Second-degree relative, friend, neighbor, coworker	59	56.7	28	70	87	60.4			
Unknown people	8	7.7	8	20	16	11.1			
Assailant known before act									
Yes	98	94.2	32	80	130	90.3	5.1	1	0.02*
No	6	5.8	8	20	14	9.7			
Living together ¹									
Yes	34	38.6	3	9.7	37	31.1	7.67	1	0.003**
No	54	61.4	28	90.3	82	68.9			
Previously attacked									
Yes	47	45.2	10	25	56	39.2	3.88	1	0.03*
No	57	54.8	30	75	87	60.8			
Crime scene ¹									
Private house, mutual house	50	57.5	7	22.6	57	48.4	13.07	2	0.001***
Workplace, entertainment venue, public place	37	42.5	23	74.2	60	50.8			
Other	-	-	1	3.2	1	0.8			

p>0.05: non significant; *p<0.01: Highly significant, **p<0.001: Very high significance, ¹In some cases the number of victims is more than one. ¹Missing data about target population was excluded.

DISCUSSION

According to the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, schizophrenia is not a predictor for aggressive behavior (Angermeyer 2000). In addition, whether psychotic patients are more aggressive than those describing themselves as normal is controversial (Soysal and Uygur, 1993).

Some people believe that schizophrenia and other psychotic disorders are associated with violence; this perception is reinforced by newspapers and contributes to the stigma attached to mental health (Fazel 2009). Having a severe mental illness alone is not a strong determinant of possible violent behavior in the future (Elbogen and Johnson, 2009).

Our results, in line with data previously obtained, indicated that the violent behavior of psychotic patients was mostly against people close to them, particularly family members, rather than strangers. When the target populations of the two groups were examined in terms of gender, 60.6% and 75% of the victims were male in the patient group and the control group, respectively, with no statistically significance ($p>0.05$). Rates of 60% and 70%, respectively, were found in another similar study (Soysal and Uygur, 1993). However, it was reported in the literature that while more males were victims of violence by schizophrenia patients than females overall, the majority of victims among family members were female (Nordström and Kullgren, 2003). In a population-wide study of 215,273 homicides, 77% of the victims were male, and 23% of the victims were female (Kellermann and Mercy, 1992). General risk assessment indicates that women are less likely to be a victim of a random act of murder than men, while they are more likely to be murdered by a spouse or a relative. The likelihood of being murdered by a stranger is lower among women than men (Kellermann and Mercy, 1992).

Compared to the control group, the patient group more often targeted married people. This result may be related to and support the literature which suggests that psychotic patients mostly target family members or relatives. Crimes were committed in mutual areas, targeted spouses and first- or second-degree relatives, together with the fact that the target population predominantly included married people.

When the crime scenes were compared for the two groups, private houses and public areas were most common for the patient group, while workplaces, entertainment venues and private non-residential areas were predominant in the control group. This result is in line with literature suggesting that patients with serious mental illnesses exhibit violent behavior mostly in non-public areas (Steadman et al. 1998, Joyal et al. 2004).

When the target populations of two groups were compared in terms of mean age, marital status, previous contact with the assailant, previous victimization, the crime scene, and having lived together with the assailant, the results were statistically significant suggesting that psychotic patients mostly targeted

their family members or relatives. This result concurs with the literature suggesting that psychotic individuals mostly exhibit domestic violence.

Compared to the control group, the patient group was more likely to target first-degree family relatives and spouses. The rate of targeting a second-degree relative, friend, neighbor or co-worker was 56.7% in the patient group and 70%, and thus, the majority of the target population, in the non-patient group.

Soysal and Uygur (1993) reported that the rate of homicidal act as being the most advanced form of aggressive behavior and the most dramatic phase of the interpersonal relationship was controversial in psychotic patients but the target population was more apparent. Our results are similar to those of the study by Soysal and Uygur (1993), which included 50 patients without criminal liability and a control group of 58 patients with criminal liability from Bakirkoy Psychiatric and Neurological Diseases Training and Research Hospital. They found that 64% of homicidal acts committed by the patient group had targeted family members, versus 29% of those committed by the non-psychotic group. Oncu et al. (2002a) found in their study, which included 268 patients without criminal liability who had completed their observation and treatment period, that 39.6% of patients committed crimes against known non-related individuals, while 10% of patients committed crimes against their spouses; 12.7% of patients committed crimes against their mother, father and/or children. In a second study, Oncu et al. (2002b) found that, of 90 schizophrenic patients who had completed their observation and treatment period, 45.6% committed crimes against known non-related individuals, while crimes against patients' mothers were the most common at the rate of 8.9%. Recently, a study including 49 schizophrenic patients with a record of homicidal crime from Elazığ Mental Hospital found that 69.4% of victims were family members (Belli et al. 2010). Several additional studies similarly revealed that psychotic individuals exhibited violent behavior against family members and relatives rather than strangers (Tardif and Koenigsberg 1985, Tuncer et al. 1986, Gottlieb and Gabrielsen 1987, Gondolf et al. 1990, Uyar et al. 1990, Kayatekin et al. 1991, Humphreys et al. 1992, Straznickas et al. 1993, Soysal and Uygur 1993, Steury and Choinski 1995, Marzuk 1996, Candy 1996, Steadman et al. 1998, Estroff et al. 1998, Turkcan et al. 2000, Erb et al. 2001, Oncu et al. 2002a, Oncu et al. 2002b, Nordström and Kullgren, 2003, Farooq et al. 2003, Joyal et al. 2004, Pera and Dailliet 2005, Shaw et al. 2006, Nielssen et al. 2007, Belli et al. 2010).

Although the literature has consistently indicated that psychotic patients often exhibit violent behavior against their family members, the most common familial targets differ among studies. While in some studies, the most common target was the mother (Estroff et al. 1998, Steadman et al. 1998, Candy 1996, Oncu et al. 2002b, Nordström and Kullgren

2003), in others the most common target was the spouse (Soysal and Uygur, 1993, Johnston and Taylor. 2003). These data are consistent with the literature suggesting that female family members are most likely to be attacked. In a thesis study on repetitive criminal behavior among psychotic patients, Seker (1996) found no statistically significant difference between the groups with or without repetitive criminal behavior, regarding the targeted individuals. In another study conducted in Turkey, the father was the most targeted by psychiatric patients without criminal liability who had committed repetitive criminal acts (Oncu et al. 2002a).

Contrary to the general beliefs and fears of society, these results support the literature data which suggests that mental health patients do not select their victims incidentally, and therefore, do not serve as a threat to everyone. Although acts of murder are relatively rare among patients with psychotic mental disorders, their impact on the social perception of mental disorders is important. Current literature indicates that the probability of violent acts is greater in psychotic patients (Nitschke et al. 2010). In a study including 39 cases of murder committed by psychotic patients in Germany, it was suggested that 10.2% of murders could be prevented if therapists or legal authorities did not make mistakes, while 15.4% of murders could be prevented

by communication between family members and patients' therapists (Nitschke et al 2011).

Professionals in the field of mental health should warn and inform the family members about possible unwanted consequences in addition to providing treatment and therapeutic support.

One of the weaknesses of this study is that it was based entirely on retrospective data collected without using standardized diagnostic tools. However, occurrences of aggression are too rare to effectively design a prospective study, particularly among psychotic patients. The other weakness of this study is that the qualifications of the crimes were not examined in detail to determine if they result in any difference between the groups. Further research is needed in this respect in Turkey.

In further studies, it would be useful to include a greater number of subjects, to make comparisons by generating homogeneous groups according to diagnosis and to evaluate the consistency of the results between the groups. In conclusion, this study emphasized that first-degree family relatives and spouses are primarily targeted by the violent acts of psychotic patients and mental health clinicians should review their role as the main component of the treatment process.

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