

PAPER**PSYCHIATRY & BEHAVIORAL SCIENCES**

Michael Soyka,^{1,2} M.D. and Peggy Schmidt,¹ Ph.D.

Prevalence of Delusional Jealousy in Psychiatric Disorders*

ABSTRACT: Delusional jealousy is a known risk factor for violence and homicide, but little is known about its prevalence in psychiatric disorders. We therefore reviewed retrospectively the psychopathological symptoms at admission and discharge, assessed with the AMDP system, of all patients admitted to the Psychiatric Hospital, University of Munich, Germany, from January 2000 through December 2008 ($n = 14,309$). We identified 72 cases of delusional jealousy (0.5% of the whole sample). The prevalence was highest in schizophrenia and other psychoses (1.3%), and more of the patients with delusional jealousy were men (43 of 72, 59.7%). One-fifth (15 of 72, 20.8%) of the patients with delusional jealousy were aggressive at admission (vs. 6.2% of the total sample). We conclude that delusional jealousy is a comparatively rare phenomenon that is most frequent in schizophrenia and related psychoses. Quite a number of affected patients are aggressive, which may indicate a risk of future violence.

KEYWORDS: forensic science, forensic psychiatry, aggression, jealousy, delusion, psychopathology

There is significant evidence for an association between major mental disorders, criminal behavior, and violent crimes (1–10), especially in schizophrenia and other psychoses ([11,12], for a review see [13]). Multiple studies have attempted to define predictors and risk factors for violence in patients with mental disorders. Apart from male sex and other psychosocial variables, substance use (2,12–17), paternal violence (18), and medication noncompliance (19–21) have been identified as such factors. On the clinical and psychopathological level, positive symptoms of schizophrenia are associated with violence (22,23). With respect to individual delusional symptoms, delusional jealousy has been identified as a risk factor for aggression and homicide, especially against the partner. Nondelusional jealousy is one of the strongest predictors of partner aggression (24). Thus, jealousy has been considered to be a notoriously dangerous passion (10,25–28) and a rather frequent motive in homicide (28–30). Recently, the association between jealousy and stalking has been stressed (28,31).

Little is known about the prevalence of delusional jealousy in psychiatric disorders. Previously, we published data from a chart review of 8134 psychiatric inpatients: we found an overall prevalence of delusional jealousy of 1.1% in hospitalized patients, with patients with schizophrenia, delusional disorder, and alcoholism being most frequently affected (32). The study presented here was conducted to replicate in a larger patient sample previous findings concerning the prevalence of delusional jealousy in psychiatric disorders.

Methods and Data Analysis

The methods of this study were similar to those of our previous study and have been described in detail elsewhere (32). In brief, we analyzed the prevalence of delusional jealousy in all patients ($n = 14,309$) admitted to the Psychiatric Hospital of the University of Munich, Germany, from January 1, 2000 through December 31, 2008. Psychiatric diagnoses were made according to the German version of the ICD-10 criteria (33). Psychopathology was assessed in all patients at admission and discharge using the AMDP system (34).

Procedure

The psychopathology and clinical history of all included patients was assessed by an experienced and trained psychiatrist using the AMDP system (34). The AMDP assessment took place at admission to and discharge from inpatient treatment. The AMDP is a comprehensive rating instrument developed by the Association for Methodology and Documentation in Psychiatry and includes more than 200 symptoms. In a semi-structured interview, each psychiatric symptom is scored on a four-point scale from 0 (absent) to 3 (severe), with defined anchor statements. Delusional jealousy is a single item within the AMDP system, defined as “Conviction of being deceived or betrayed by a loved one. An unfounded conviction.”

Statistical Analysis

Data were analyzed using SPSS, version 16.0 (SPSS Inc., Chicago, IL). Metric data were analyzed by the Kolmogorov–Smirnov test and categorical data by the chi-square test.

Results

A total of 14,309 patients were admitted to the Psychiatric Hospital in 2000–2008: 7087 men (49.5%) and 7222 women (50.5%).

¹Department of Psychiatry, Ludwig-Maximilian University, Nussbaumstr. 7, 80336 Munich, Germany.

²Psychiatric Hospital Meiringen, PO Box 612, 3860 Meiringen, Switzerland.

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The mean age of the patients was 47.1 years, and the mean duration of stay was 45.6 days.

Seventy-two cases of delusional jealousy were identified at admission (0.5%). The mean age of these patients was slightly but not significantly higher than that of the patients without delusional jealousy (47.4 vs. 46.9 years). With respect to diagnosis, 59.7% of the patients with delusional jealousy (43/72) had a diagnosis of psychotic disorder (schizophrenia, schizotypal, or delusional disorder), separated delusional disorders' share is 11.1% (8/72); the next most frequent diagnosis was mood disorders (14/72, 19.4%), followed by organic mental disorders and substance-induced disorders (5/72 [6.9%] each) (Table 1). The prevalence was highest in patients with schizophrenia, schizotypal, or delusional disorder (43/3304, 1.3%) and lower in affective disorders (14/4511, 0.3%) and the other disorders (0.1% to 0.4%). The syndrome was found more frequently in men (43/72, 59.7%) than in women (29/72, 40.3%), whereby the difference was not significant. The proportion of delusional jealousy among delusional disorders was 78.3% (72/91). Aggression (an AMDP item) was present as a psychopathological symptom in 20.8% of the patients with delusional jealousy (15/72) at admission but in only 6.2% (887/14,309) of the whole sample.

Discussion

Forensic risk assessment plays an important role in the prevention of violence and homicide. Psychopathological and clinical findings may help to predict risk of later violence in psychiatric patients. Delusional jealousy is reported to be of special relevance in this respect. Multiple studies have linked jealousy to aggression and violence against the spouse and have identified this passion as a risk factor for homicide (25,26,28–31). In the present study, we studied the prevalence of delusional jealousy in psychiatric inpatients by analyzing psychopathological symptoms recorded with the AMDP system and found an overall low prevalence of 0.5%. The prevalence of delusional jealousy was highest in patients with schizophrenia and other psychoses (1.3%), while fewer patients with affective disorder were affected (0.3%). Although alcoholism has been reported to be significantly associated with delusional disorder (35), in our sample we found no such association and few patients with substance-induced disorders displayed this syndrome (prevalence 0.1% for both substance-induced disorders overall and alcohol-induced disorders in particular). A relatively high

prevalence of delusional jealousy has been reported in various organic mental disorders, including dementia (as was already reported by Alzheimer [36]) and many other such disorders (37–42), but we found a low prevalence (0.3%) in our sample.

The overall prevalence estimates for delusional jealousy in this study are in line with previous research. Retterstol (43) found the same prevalence as we did (0.5%) in a sample of 3441 patients (18 cases). In a previous study with a similar design, we analyzed the data of 8134 psychiatric inpatients and identified 93 cases of delusional jealousy; the prevalence rate of 1.1% was slightly higher than in the current sample. The relative association of delusional jealousy with schizophrenia is well known (44), as is the association with delusional disorders, in which it presents as a key symptom. The overall prevalence of delusional disorders in the general population is very low (43).

We found a relatively high number of patients with delusional jealousy and aggressive behavior (15 of 72 patients; 20.8%). Aggression may be of relevance for the risk of future violence in these patients. Although this was an exploratory analysis and patients were not followed up, these findings are indicative of delusional jealousy being a risk factor for future violence, as indicated by others (24,28,45).

A number of limitations of our study must be addressed. First, data were obtained retrospectively by studying records and psychopathological data of patients admitted to hospital for treatment of a psychiatric disorder. The rate of delusional jealousy in minor, non-hospitalized forms of mental disorders may be even lower than was found in this study. Second, a selection bias must be considered because our sample consisted only of inpatients treated at a university hospital. On the one hand, confused demented patients in particular may be underrepresented in this sample. However, from a forensic science point of view, this may be of less interest because this group may not be the key perpetrators of severe violence or aggression. On the other hand, some studies have indicated that patients with delusional disorders, in whom delusions of jealousy may be more prominent, have a comparatively low hospitalization rate. Such cases may therefore be missing in our sample.

In conclusion, delusional jealousy is a rare syndrome. It appears to occur more frequently in men, although this requires further study. The prevalence is highest in schizophrenia and related disorders. From a forensic perspective, patients showing aggressive behavior are probably at the highest risk of future violence related to delusional jealousy.

TABLE 1—Prevalence and sex ratio of delusional jealousy in psychiatric inpatients.

	Total n (%) 14,309 (100)			Delusional Jealousy n (%)			
	Total n (%) 14,309 (100)	Male 7087 (49.5)	Female 7222 (50.5)	With 72 (0.5)		Without 14,237 (99.5)	
				Male 43 (59.7)	Female 29 (40.3)	Male 7044 (49.5)	Female 7193 (50.5)
Organic, including symptomatic, mental disorders	1585 (11.1)	746 (10.5)	839 (11.6)	4 (9.3)	1 (3.4)	742 (10.5)	838 (11.7)
<i>Mental and behavioral disorders</i>							
Because of psychoactive substance use	3175 (22.2)	2106 (29.7)	1069 (14.8)	3 (7.0)	2 (6.9)	2103 (29.9)	1067 (14.8)
Because of alcohol	2484 (17.4)	1683 (23.7)	801 (11.1)	1 (2.3)	1 (3.4)	1682 (23.9)	800 (11.1)
Schizophrenia, schizotypal, and delusional disorders	3304 (23.1)	1613 (22.8)	1691 (23.4)	22 (51.2)	21 (72.4)	1591 (22.5)	1670 (23.2)
Delusional disorders	91 (0.6)	47 (0.7)	44 (0.6)	5 (11.9)	3 (10.3)	42 (0.6)	41 (0.6)
Mood (affective) disorders	4511 (31.5)	1902 (26.8)	2609 (36.1)	10 (23.3)	4 (13.8)	1892 (26.9)	2605 (36.2)
Neurotic, stress-related, and somatoform disorders	883 (6.2)	404 (5.7)	479 (6.6)	2 (4.7)	1 (3.4)	402 (5.7)	478 (6.6)
Disorders of adult personality and behavior	534 (3.7)	190 (2.7)	344 (4.8)	2 (4.7)	0 (0.0)	188 (2.7)	344 (4.8)
Mean age (SD)	47.1 (17.1)	45.7 (16.3)	48.6 (17.8)	46.0 (17.2)	49.4 (15.9)	45.5 (16.3)	48.1 (17.6)

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Additional information and reprint requests:
 Michael Soyka, M.D.
 Psychiatric Hospital Meiringen
 PO Box 612
 3860 Meiringen
 Switzerland
 E-mail: michael.soyka@privatklinik-meiringen.ch