Delusional Disorder: Jealous and Nonjealous Types*

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Summary. We studied the records of 101 patients with delusional disorder admitted to the Psychiatric Hospital between 1920 und 1980 and divided the sample into those with jealous (43) and those with nonjealous (58) delusions. Patients and relatives were located by telephone and follow-up information was collected. Compared with the nonjealous patients, the jealous ones were more likely to have had a single delusion, and to have experienced a more benign course as indicated by a lower rate of hospitalization and outpatient treatment. The original delusion tended to remain and the illness did not develop into another form of delusional disorder or other psychiatric illness.

Key words: Delusional disorder – Paranoid disorder – Conjugal paranoia – Delusional jealousy

Introduction

In recent years, the classification of delusional disorders has received increasing attention. Kendler has reviewed data from follow-up and family studies, which indicate that delusional disorders are independent psychoses unrelated to schizophrenia and affective disorders (Kendler 1980). If this is the case, an important question is whether delusional disorders represent a single illness. DSM-III-R subtypes the delusional disorders by predominant symptom: persecutory, jealous, erotomanic, somatic and grandiose types (DSM-III-R, 1987). However, the more traditional subtyping was based on chronicity. Paranoia

was considered a chronic stable delusional system, while paranoid state was an acute paranoid reaction which remitted. DSM-III followed this convention by using a six-month duration as the cutoff between acute paranoid disorder and paranoia (DSM-III, 1980).

Retterstol's findings suggest that the clinical picture of acute and chronic delusional disorders may be different (Retterstol 1966). He used the term "paranoia" to refer to cases with chronic, well systematized delusions; 88% of these had been ill for longer than six months. The term "paranoid disorders" referred to acute, less systematized delusions; and 54% of these had been ill for less than six months. Interestingly, 54% of the chronic group had jealous delusions, compared with 2% of the acute group; and conversely, 79% of the acute group had persecutory delusions, compared with only 8% of the chronic one. These observations suggest that most chronic delusional disorders are conjugal paranoias, and that most acute ones are persecutory.

The purpose of this study was to determine whether persecutory and jealous delusional disorders differ from each other in other respects. Since delusional disorders account for less than 1% of hospital admissions (Kendler 1982), few studies have approached them in a systematic manner. A retrospective chart review provides one means of doing this. The Iowa Psychiatric Hospital is an ideal source of material for a chart review because it has admitted approximately 26,000 patients since opening in 1920.

Methods

Records for the present study were identified from a chart review of all paranoid psychoses admitted to the Iowa Psychiatric

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Hospital from 1920 through 1980. A total of 1,483 records with discharge diagnoses including the terms "paranoid" or "paranoia" were reviewed. One hundred and one charts meeting study criteria for a paranoid disorder were included. These criteria required the presence of a non-bizarre delusion in the absence of DSM-III criteria for schizophrenia, schizophreniform disorder, affective disorder, or organic brain syndrome (Kendler 1980). Disorders with hallucinations were excluded, as were those with a flat or inappropriate affect. These criteria are those suggested by Winokur for delusional disorder (Winokur 1977). They deviate from the DSM-III criteria in the sense that the delusional content was not limited to persecutory or jealous themes. Patients with jealous delusions were classified as "jealous" regardless of the presence of other delusions, and the remainder were classified as non-jealous delusional disorders (DSM-III-R, 1987). Chronicity was not a criterion for inclusion in the study.

The records were read by a social worker (CC) and reviewed by a psychiatrist (RC) who made the study diagnosis. Cases included in the study were coded for characteristics of the premorbid personality, illness chronology, clinical picture, treatment, condition at discharge, and disposition. The family histories were reviewed blindly by a psychiatry resident (RW) who made diagnoses based on the Family History Research Diagnostic Criteria (Andreasen et al. 1977) and also noted the presence of paranoid traits in relatives.

Whenever possible, telephone contacts were made by a research assistant to patients and family members after obtaining informed consent. In a few cases relatives no longer existed and information was obtained from personnel at institutions or simply from records. Since many of the patients were deceased, the follow-up was designed to assess features of the course and outcome of the illness that would be remembered by family members and other informants. Based on the follow-up information, one of us (RC) made a determination of whether the diagnosis had remained that of a delusional disorder or whether another illness which could explain the presenting picture had subsequently developed. This determination was, of course, not blind to the symptoms the patient had originally presented with.

Statistical analysis were carried out using the Chi square test for discontinuous data and analysis of variance for continuous data.

Results

One hundred one patients with simple delusional disorder were identified from 26,000 admissions over 61 years. Of these, 43 had jealous delusions and the remaining 58 did not. Thus, the frequency of conjugal paranoia in this series was 0.17% of all admissions.

Since the study spanned 61 years it is important to determine whether the jealous and nonjealous patients were admitted in the same years before comparing the two; otherwise, differences in clinical practice might be mistaken for differences in clinical picture. When the two groups were stratified by decade no statistically significant differences between the two were found.

The demographic characteristics of the patients are shown in Table 1. Women outnumbered men two

Table 1. Demographic data

	Jealous	Nonjealous
Number	43	58
Sex Ratio (F/M)	28/15	28/30
Mean Age	41.4	39.9
Mean Age of Onset	39.4	36.6
Number Single	0	19
Mean Years Education	9.7	11.7**
Mean Occupational Status ^a	4.3	4.3

^a Rated from 1 to 7 on the Hollingshead scale for pt. or provider

to one in the jealous group, while in the nonjealous group the sex ratio was one to one, although the difference between the two sex ratios was not significant. The average age of admission for both groups of patients was 40-41 years and the delusions had been present for an average of two to three years prior to admission. The two groups did not differ significantly on any of these features. All of the jealous patients were married, due to the nature of their delusions, but 19 of the 58 nonjealous patients were single. The jealous patients were less educated, having completed an average of 9.7 years of school compared with 11.7 years completed by the nonjealous group (P < 0.05). Nevertheless, the occupational status (rated from 1 to 7 on the Hollingshead scale) of the two groups was the same.

While the medical records frequently noted premorbid personality traits, only a minority of the patients could be classified on the basis of the limited information. Nevertheless, 16% of the jealous patients were noted to have jealous premorbid traits compared with none of the nonjealous group, and 14% of the nonjealous patients were noted to have persecutory premorbid traits compared with 5% of the jealous group. These findings suggest some degree of concordance between premorbid personality and later delusional content, provided the premorbid traits were not early symptoms of the delusional system.

An acute onset was defined as the development of delusions over six weeks or less. Twenty jealous and 22 nonjealous patients were considered to have had an acute onset using this definition. Once the illness developed it ran an unremitting course in nearly all patients; 41 jealous and 55 nonjealous patients had been continuously ill since the onset of the delusions. Five jealous patients and 13 nonjealous ones had previously been hospitalized for the same illness.

The delusional systems of the jealous patients tended to be limited to the theme of jealousy (Table

^{**} P < 0.01

Table 2. Delusions (in percent)

	Jealous (43)	Nonjealous (58)
Persecutory	51	91***
Jealous	100	0
Grandiose	0	3
Erotic	0	5
Religious	3	2
Somatic	2	2
Hypochondriacal	4	9
Other	0	5
Systematized Delusions	81	81
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^{***} P<0.001

Table 3. Hospital course

	Jealous (43)	Nonjealous (58)
Hospitalization (days)	40	50
Std Dev	(36)	(26)
Condition at Discharge		
Recovered	5	4
Improved	13	23
Unchanged	25	29
Worse	0	2
Discharged Home	28	37

2). While over half had persecutory delusions, these were usually secondary to the jealous ones and centered around fears that the spouse might attempt to harm them. On the other hand, 91% of the nonjealous patients had persecutory delusions. The nonjealous patients also had a greater variety of delusional themes; 15 of them had grandiose, erotic, religious, somatic, hypochondriacal and other delusions, compared with only 3 of the jealous group (P < 0.05). The delusions were well systematized in 81% of both types of patients.

The hospital course was relatively short, both groups remaining in the hospital for an average of about six weeks (Table 3). The majority of the patients were admitted prior to modern psychopharmacology and a relatively small number were treated with medication; 7 jealous and 17 nonjealous patients received antipsychotic drug therapy.

The condition at discharge was similar for both types of patients (Table 3). Few had recovered to the point of gaining insight into their delusions, but 13 jealous and 23 nonjealous patients improved in the sense of talking less about them. The remainder of

Table 4. Follow-up data

	Jealous	Nonjealous
Number Located	37	51
Interview With Pt., Spouse, Rel.	32	38
Length of Follow-up: Yrs (Std Dev)	24 (13)	26 (14)
Deceased	22	25
Mean Age (Last Contact)	66	66
Sex Ratio (F/M)	25/12	24/27

Table 5. Status at follow-up

	Jealous $(N = 37)$	Nonjealous $(N = 51)$
Outcome		
Recovered	12	19
Delusional	23	24
Deteriorated	2	8
Diagnosis		
Delusional Disorder	29	32
Schizophrenia	6	14
Affective Disorder	2	5
Suicide	4	1
Medication	3	21***
Institution	4	21***
Jealous Delusions at Follow-up	17	0

^{***} P < 0.005

each group was unchanged, and two of the nonjealous patients were worse by the time of discharge. Twenty-eight jealous and 37 nonjealous patients were discharged home and the remainder were transferred to another institution.

The telephone follow-up was conducted at an average of 25 years after discharge, the follow-up ranging from 2–58 years. Eighty-seven percent of the patients were located, and the two groups did not differ with respect to number of patients located, length of follow-up, or quality of the information obtained (Table 4).

Twelve of the 37 jealous patients who were located had not mentioned their delusions further and were considered to have recovered (Table 5). Twenty-three jealous and 24 non-jealous patients were still delusional. The two jealous and eight non-jealous patients who deteriorated developed schizophrenia. When the delusion persisted the dominant theme persisted as well. Seventeen of the jealous patients remained predominantly jealous, while none of the nonjealous group had developed jealous delusions.

Table 6. Family	history	diagnoses	among	first-degree	relative
(in percent)					

	Jealous	Nonjealous
Number of Relatives	301	342
Affective Disorder	1.7	1.5
Schizophrenia	0.3	0.6
Alcoholism	4.7	2.9
Suicide	0.7	0.6
Paranoid Disorders	2.7	2.0
Undiagnosed Illness	2.7	3.8

The follow-up diagnosis remained delusional disorder in 28 jealous and 30 nonjealous patients (Table 5). Of the patients who were diagnosed as delusional disorders at follow-up, only three had developed hallucinations, one jealous and two nonjealous patients. Thus, paranoid disorder when strictly defined is not characterized by hallucinations. Schizophrenia accounted for the majority of rediagnoses in both groups, developing in 6 jealous and 14 nonjealous patients. Four patients in the jealous group and one in the nonjealous group had committed suicide, giving a suicide rate of 5% for the delusional disorders overall, and 9% for the jealous subgroup.

Only seven of the jealous patients had been treated for their illness since discharge from the hospital. Of these, three were receiving psychiatric medications at last contact and four were in institutions. By contrast, 27 of the nonjealous patients had been treated, 21 were receiving psychiatric medication and 21 were in institutions at follow-up.

The family history of psychiatric disorder among first-degree relatives was assessed from the medical records without knowledge of the diagnosis of the index patient. The rates of schizophrenia, affective disorder, alcoholism and paranoid traits were the same in families of jealous and nonjealous patients (Table 6).

Discussion

From these findings it is possible to draw a profile of a typical case of conjugal paranoia and compare it with non-jealous delusional disorder as well as with conjugal paranoia in other studies. In this study the modal patient was a 41 year old woman who had been ill for an average of two years with an illness which had developed acutely, although jealous traits may have been present for years before the onset of the delusions. The jealous delusion was well systematized and no other delusions were present. The patient was hospitalized for six weeks, discharged

home, and never rehospitalized, although the delusional jealousy was a likely as not to persist. The patient did not develop hallucinations, new delusions, or other psychiatric illness and will not need further treatment.

The most striking difference between the jealous and nonjealous delusional disorders was their outcome. Although the majority of both groups retained their delusional beliefs, the nonjealous delusional disorders were far more likely to be in institutions and under medical treatment for their symptoms. This outcome difference, and the fact that none of the nonjealous patients developed jealous delusions during follow-up, indicates that these two groups of patients have a strikingly different prognosis.

Both this study and Retterstol's (Andreasen et al. 1977) found conjugal paranoia to be a rare condition, accounting for 0.17% of admissions in the first instance and 0.5% in the latter. In both studies the average age at admission was in the fifth decade, and the patients had been ill for an average of two years before admission. Only two of Retterstol's 18 patients were female, while 28 of 43 patients in the present study were female. Both studies found that most patients were discharged home following a relatively brief hospitalization. On follow-up, 11 of Retterstol's 18 patients were described as non-delusional, a higher proportion than was found in this study.

The primary purpose of the present study was to determine whether conjugal paranoia differed from non-jealous delusional disorder. The jealous patients were more likely to have been secondary to the jealous ones. The other distinguishing feature at index admission was the lower educational level of the jealous patients. The greatest differences appeared on follow-up. Here, the jealous patients experienced a more benign course as indicated by less need for rehospitalization or subsequent outpatient treatment. Once the diagnosis of conjugal paranoia was made it was unlikely to change over the course of time. Hallucinations, which have been described in paranoid disorders, were unlikely to develop. The picture that develops is one of a disorder which remains consistent over time and does not develop into another delusional disorder.

The family history findings of schizophrenia may be compared to previously published data on schizophrenic patients from the same hospital and employing essentially the same methods (Winokur et al. 1972). Parents and siblings of schizophrenics had a morbid risk of 2.1%, over three times as high as the rate of schizophrenia in the families of these delusional disorder patients. This finding further supports the separation of delusional disorder and schizophrenia as independent illnesses.

References

- Andreasen NCA, Endicott J, Spitzer RL, Winokur G (1977) The family history method using diagnostic criteria: reliability and validity. Arch Gen Psychiatry 34: 1229–1235
- Diagnostic and Statistical Manual of Mental Disorders (3rd edn) DSM-III (1980) The American Psychiatric Association, Washington, D.C.
- Diagnostic and Statistical Manual of Mental Disorders (3rd edn Revised) DSM-III-R (1987) The American Psychiatric Association, Washington, D.C.
- Kendler KS (1980) The nosologic validity of paranoia (simple delusional disorder: a review) Arch Gen Psychiatry 37: 699-707
- Kendler KS (1982) Demography of paranoid psychosis (delusional disorder): A review and comparison with schizophrenia and affective illness. Arch Gen Psychiatry 39:890–902

- Retterstol N (1966) Paranoid and Paranoiac Psychoses. Charles C. Thomas, Springfield, IL
- Retterstol N (1967) Jealous-Paranoiac Psychoses: A personal follow-up study. Acta Psychiatr Scand 43:75–107
- Winokur G, Morrison J, Clancy J, Crowe RR (1972) The Iowa 500 II: A blind family history comparison of mania, depression and schizophrenia. Arch Gen Psychiatry 27:462-464
- Winokur G, Morrison J, Clancy J, Crowe RR (1972) The Iowa 500 II: A blind family history comparison of mania, depression and schizophrenia. Arch Gen Psychiatry 27:462–464
- Winokur G (1977) Delusional disorder (paranoia) Compr Psychiatry 18:511-521

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