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Schizophrenia Research 62 (2003) 51–58

SCHIZOPHRENIA
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Distinguishing between first-admission schizophreniform disorder and schizophrenia

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Received 22 February 2002; received in revised form 13 May 2002; accepted 22 May 2002

Abstract

Background: The validity of schizophreniform disorder remains controversial. Past research suggests that cases of schizophreniform disorder may be: (1) atypical cases of affective disorders, (2) cases of schizophrenia in early course, or (3) a heterogeneous group of disorders including a subgroup with benign course and outcome which maintains this diagnosis in the long term. **Method:** We tested the validity of the schizophreniform disorder diagnosis by comparing the socio-demographic and baseline clinical characteristics, 24-month course and outcome, and 6- and 24-month research diagnoses of 34 cases initially diagnosed with schizophreniform disorder, and 128 cases with schizophrenia, drawn from a cohort of 628 first-admission patients in the Suffolk County Mental Health Project. **Results:** Compared to patients with schizophrenia, those with schizophreniform disorder were more likely to remit fully by 6 months and retain this status by 24 months. Only about half of the patients with schizophreniform disorder were re-diagnosed with schizophrenia or schizoaffective disorder at 24-month follow-up, 13% were re-diagnosed with affective disorders and 19% retained the diagnosis of schizophreniform disorder. In contrast, 92% of cases with a baseline diagnosis of schizophrenia retained this diagnosis at 24-month follow-up. The findings were similar in comparisons with schizophrenia patients having onset of symptoms within 6 months of hospitalization. **Conclusions:** Schizophreniform disorder is a heterogeneous category, which includes a small group with benign psychotic disorders who maintain this diagnosis over at least 24 months. Better delineation of this subgroup has important treatment implications.

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Keywords: Schizophreniform; Schizophrenia; Validity; Diagnostic stability

1. Introduction

The concept of schizophreniform disorder was introduced by Langfeldt (1939), who distinguished this disorder from typical schizophrenia on the basis of outcome. That is, the initial symptom profiles of the

two disorders may be similar, but patients with schizophreniform disorder have a much better outcome. With minor variations, Langfeldt's concept of schizophreniform disorder has survived to our time (Strakowski, 1994). Thus, DSM-IV defines schizophreniform disorder as a psychotic disorder quite similar to schizophrenia but with shorter duration and no social and occupational impairment (American Psychiatric Association, 1994). Nevertheless, the

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empirical basis for the validity of schizophreniform disorder has not been clearly established, and the results of research have been inconclusive.

One line of research suggests that schizophreniform disorder is actually a variant of affective disorders. Hirschowitz et al. (1980) even proposed that cases of both schizophreniform disorder and good prognosis schizophrenia might be atypical cases of affective disorders with schizophrenia-like features. Two empirical studies support this hypothesis. Bergem et al. (1990), after re-diagnosing Langfeldt's "questionable schizophrenia" cases using DSM-III and ICD-9 criteria, reported that the majority of patients originally diagnosed with schizophreniform disorder were reclassified as affective disorder using modern criteria. The second study by Benazi (1998) involved a 6-year follow-up of 20 patients with schizophreniform disorder with good prognostic features, defined by onset of psychotic symptoms within 4 weeks of first noticeable change in behavior or functioning, confusion or disorientation at the height of psychotic episode, good premorbid social or occupational functioning, and absence of blunted or flat affect. Fourteen patients developed affective syndromes and only two were re-diagnosed with schizophrenia.

Others have argued that schizophreniform disorder more closely resembles schizophrenia. One indirect source of data is the Kendler and Walsh (1995) report indicating a higher risk of schizophrenia spectrum disorders, but not affective disorders, in relatives of schizophreniform patients. Two prospectively designed studies indicated that except for duration of psychosis, the initial clinical presentations of patients hospitalized with schizophreniform disorder closely resembled those of patients with schizophrenia (Makanjuola and Adedapo, 1987; Zarate et al., 2000). However, while Makonjoula and Adedapo found that the schizophreniform patients had better outcomes over a 3-year period, there was a significant difference in the 6-month but not the 24-month remission rates in the Zarate et al. cohort.

In his comprehensive review, Strakowski (1994) concluded that as a category, DSM-III and DSM-III-R schizophreniform disorder is highly unstable. Most patients are later re-diagnosed as having schizophrenia, schizoaffective disorder or an affective disorder. In a small group of patients, however, the psychotic

episode remits within 6 months and the diagnosis does not change to schizophrenia or affective psychosis. Strakowski labeled these cases "true" schizophreniform disorder, i.e., a remitting nonaffective psychosis. Beiser et al. (1988) found that 30% of first-episode cases diagnosed at baseline with DSM-III-R schizophreniform disorder had remitted by 9-month follow-up, while 62% were diagnosed with schizophrenia and had poorer prognosis. On the other hand, Zarate et al. (2000) found that all nine of their patients initially diagnosed with schizophreniform disorder were reclassified as having schizophrenia ($N=7$) or schizoaffective disorder ($N=2$) at 24-month follow-up.

In this paper, we extend the findings of Zarate et al. (2000) by investigating the diagnostic validity of schizophreniform disorder at 24-month follow-up in a larger, more representative sample of first-admission patients. We first compare the demographic and initial clinical characteristics of patients diagnosed at baseline with schizophreniform disorder and schizophrenia. We previously reported, based on data from the first half of our sample, that 64% of patients diagnosed with schizophreniform disorder at baseline retained this diagnosis at 6-month follow-up (Fennig et al., 1994). Here we test the validity of schizophreniform disorder by examining its course and diagnostic stability at the 2-year follow-up. Additional comparisons focusing on the schizophrenia subgroup whose first psychotic symptom occurred within 6 months of admission were also conducted.

2. Methods

The sample is part of the Suffolk County Mental Health Project recruited between 1989 and 1995 from the 12 inpatient facilities in the county, including six community hospital units, a university hospital unit, a VA hospital, an adult state psychiatric center, two private facilities (added in 1994), and a children's state psychiatric center (Bromet and Fennig, 1999). Inclusion criteria were first admission (or current admission within 6 months of the first admission), age 15–60 years, resident of Suffolk County, New York, and presenting clinical evidence of psychosis, prescription of neuroleptic medication, and/or an admission facility diagnosis indicating psychosis. Exclusion criteria were moderate or severe mental

retardation, an inability to speak English, or inability to provide written informed consent. The baseline interview usually took place in the hospital. A complete description of the study was provided, and written informed consent was obtained to participate in the study and for study staff to review medical records, talk with treating clinicians, and interview significant others. The follow-up interviews were conducted 6 and 24 months later by the same interviewer when possible. The interviewers were master's level mental health professionals.

It should be noted that while the Suffolk County Mental Health Project provided a broad coverage of most cases with first-admission psychosis admitted to various facilities in the County, its sample does not necessarily represent *all* cases within this catchment area. As data from general population surveys indicate, many patients with severe mental disorders are not hospitalized and some receive no professional help (Wang et al., 2002).

For recruited patients, consensus research diagnoses were made at baseline (DSM-III-R), and 6- and 24-month follow-ups (DSM-IV). Consensus diagnoses of substance use disorders (DSM-III-R) were also formulated at the same time. The diagnoses were based on several sources of information, including the Structured Clinical Interview for DSM-III-R (SCID; Schwartz et al., 2000) administered at each interview, clinical ratings by the interviewer, discharge summaries from all hospitalizations, interviews with clinicians and significant others, and the case narratives prepared by the interviewer. At baseline, two project psychiatrists independently reviewed the materials. If they did not agree on the diagnosis, the opinion of a third psychiatrist was solicited and a consensus opinion was reached. At the 6-month and 2-year follow-ups, the consensus diagnosis was formulated at team meetings involving two to four psychiatrists (Fennig et al., 1994; Schwartz et al., 2000).

The present study focused on participants with baseline diagnoses of schizophreniform disorder and schizophrenia. We note that while baseline diagnoses were based on DSM-III-R criteria and follow-up diagnoses (reported below) on DSM-IV, the major difference in diagnostic criteria for schizophreniform disorder between the two systems was in the group A criteria of schizophrenia. In DSM-III-R, group A

criteria included “delusions,” “prominent hallucinations,” “incoherence,” “catatonic behavior,” and “flat or grossly inappropriate affect,” while in DSM-IV, the criteria included “delusions,” “hallucinations,” “disorganized speech,” “grossly disorganized or catatonic behavior,” and “negative symptoms.” The Suffolk County Mental Health Project diagnosticians were asked to make both DSM-III-R and DSM-IV consensus diagnoses at 6- and 24-month follow-ups. Thus, we were able to assess the correspondence between the DSM-III-R and DSM-IV criteria for schizophrenia by comparing diagnoses under these two systems. Our analyses showed that of the 177 participants who received a DSM-III-R diagnosis of schizophrenia at 6 months, 175 (99%) received the same diagnosis under DSM-IV. Similarly, of the 194 with a DSM-III-R diagnosis of schizophrenia at 24 months, 193 (99%) received the same diagnosis under DSM-IV. Thus, the group A criteria show remarkable agreement across the two systems.

In this study, the schizophreniform and schizophrenia groups were compared on a number of demographic and clinical variables. Demographic variables were age at hospitalization; race (black vs. other); education (high school or less vs. more than high school); special education placement (yes or no); and employment in the year before hospitalization (full time work/school, part-time work/school or homemaker, unemployed). Clinical history variables were age at onset of psychotic symptoms; the interval from onset of psychosis to hospitalization [<28 days (<4 weeks), 29–183 days (~ 1 –6 months), and >183 days (>6 months)]; premorbid social and scholastic adjustment, assessed with an instrument modeled after the Cannon-Spoor et al. (1982), with scores ranging from 0 (poorest) to 2 (best); the GAF rating for the best month in the year prior to admission; and the baseline consensus diagnosis of DSM-III-R lifetime substance disorder. Clinical status at hospitalization was measured by the total score of the Brief Psychiatric Ratings Scale (BPRS; Woerner et al., 1988), and severity of negative and positive symptoms judged by the average global ratings of the Scale for the Assessment of Negative Symptoms (SANS; Andreasen, 1983) and the Scale for the Assessment of Positive Symptoms (SAPS; Andreasen, 1984). We also compared the groups by type of hospital (community vs. public).

Four aspects of post-hospital course were examined: (1) achieving full remission in the first 6 months of follow-up (based on interviewer ratings on a 5-point scale ranging from “original disorder continued” to “no psychotic symptoms-full remission >3 months”); (2) achieving a period of full remission (a period of at least 4 weeks in which patients were virtually symptom-free and back to their premorbid personality) during the first 24 months of follow-up, based on consensus ratings using all available information (Jablensky et al., 1992); and (3 and 4) the 6- and 24-month DSM-IV consensus diagnoses. We note that we did not specifically assess “recovery,” because the information from this, and many epidemiologic studies, is not sufficient to differentiate recovery from full symptomatic remission. As noted in DSM-IV (p. 2), this differentiation requires detailed knowledge not only about course but also about the “. . . need for continued evaluation or prophylactic treatment” (p. 2).

The analysis was conducted using the Pearson chi-square tests for categorical variables and *t*-tests for continuous measures. To adjust for possible spurious findings due to multiple testing, Bonferroni correction was conducted for the main analyses. These analyses included 19 comparisons, thus a Bonferroni-corrected *P* value of <0.0026 (0.05/19=0.0026) was considered statistically significant for these comparisons.

3. Results

We interviewed a total of 695 research participants at baseline (for a response rate of 72%). A small group of patients were drawn from outpatient settings or were later found not to have had genuine psychotic symptoms. For this report, we limited the analysis to patients who were both hospitalized at baseline and had genuine psychotic symptoms (*N*=628). In this group, 34 (5.4%) were diagnosed at baseline with schizophreniform disorder and 128 (20.4%) with schizophrenia. At the 24-month follow-up, we were able to re-diagnose and assign course ratings for 32 (94%) of the 34 patients with schizophreniform disorder. For the schizophrenia group, 122 (95.3%) were re-diagnosed but only 105 (82.0%) had sufficient retrospective information that permitted us to assign ratings of illness course.

At the time of their first hospitalization, the patients diagnosed with schizophreniform disorder

were somewhat younger than those with schizophrenia ($t=2.1$, $df=160$, $P=0.038$) although the difference was not statistically significant after Bonferroni correction. There was no significant difference in the age at onset of psychosis. The two groups were similar with respect to sex, race, education, and placement in special education.

However, consistent with the requirement that schizophreniform disorder is characterized by short duration of illness, these patients were more likely to be hospitalized within 6 months of the onset of their psychosis ($\chi^2=49.7$, $df=2$, $P=0.000$), working full time or in school during the year before their hospitalization ($\chi^2=15.4$, $df=2$, $P=0.001$), and had substantially better GAF scores for their best month of functioning in the year before admission ($t=8.2$, $df=160$, $P<0.001$). On the other hand, there were no significant differences in the average premorbid adjustment ratings, lifetime substance abuse, or type of hospital where the groups were admitted.

Clinically, at the time of their hospitalization, the overall BPRS and SAPS scores were similar. However, the patients with schizophreniform disorder had somewhat less prominent negative symptoms (SANS: $t=2.7$, $df=158$, $P=0.013$), although the difference was not statistically significant after Bonferroni correction.

By 6-month follow-up, patients initially diagnosed with schizophreniform disorder were more likely to achieve a period of complete remission ($\chi^2=15.2$, $df=1$, $P=0.000$), an advantage that was maintained over the entire 24-month period ($\chi^2=34.3$, $df=1$, $P=0.000$). Overall, 30 (21.9%) out of the total sample of 137 assessed at 24 months were fully remitted at this time. Patients with initial schizophreniform disorder diagnosis were also significantly less likely to be diagnosed with schizophrenia or schizoaffective disorder at 6-month follow-up ($\chi^2=34.8$, $df=1$, $P=0.000$). (All these test were statistically significant after Bonferroni correction.)

With respect to the 24-month longitudinal diagnosis, considered the final study diagnosis, 6 of the 32 (18.8%) schizophreniform cases retained this diagnosis at the 24-month follow-up and thus did not meet the criteria for schizophrenia or an affective disorder. Sixteen (50%) were subsequently diagnosed with schizophrenia ($N=13/16$) or schizoaffective disorder ($N=3/16$, including 1 bipolar and 2 depressed sub-

types). The remainder of those originally diagnosed with schizophreniform disorder were re-diagnosed with affective disorder (12.5%, including $N=2$ with bipolar disorder and $N=2$ with depressive disorder), psychosis NOS ($N=1$, 3.1%), substance-induced disorder ($N=2$, 6.3%), and brief psychotic disorder ($N=3$, 9.4%). Of the 122 schizophrenia patients having a 24-month longitudinal diagnosis, the vast majority either retained their baseline diagnosis ($N=107$, 87.7%) or were re-diagnosed with schizoaffective disorder ($N=5$, 4.1%, including 2 manic and 3 depressed subtypes). The remainder received 24-month diagnoses of bipolar disorder ($N=2$, 1.6%),

psychosis NOS ($N=3$, 2.5%), substance-induced psychosis ($N=2$, 1.6%), and unknown diagnosis ($N=3$, 2.5%) (Table 1).

3.1. Additional analyses

The baseline diagnosis of schizophreniform disorder was subcategorized into those with and without good prognostic features based on the DSM-III-R and DSM-IV categorization. The designation of “with good prognostic features” requires meeting at least two of the following criteria: (1) onset within 4 weeks, (2) symptoms of confusion, disorientation or perplex-

Table 1

Characteristics of patients with baseline research diagnoses of schizophreniform disorder ($N=34$) and schizophrenia ($N=128$)

Variable	Schizophreniform	Schizophrenia	<i>P</i>
Age, years (mean \pm S.D.)	25.4 \pm 9.2	29.0 \pm 9.0	0.038 ^{a,*}
Male, <i>N</i> (%)	21 (61.8)	82 (64.1)	NS
Black, <i>N</i> (%)	7 (20.6)	35 (27.3)	NS
Education high school or less, <i>N</i> (%)	25 (73.5)	78 (60.9)	NS
Special education, <i>N</i> (%)	12 (out of 33) (36.4)	45 (out of 125) (36.0)	NS
Employment, <i>N</i> (%)			
Full time work or school	18 (52.9)	26 (20.3)	
Part-time work or homemaker	5 (14.7)	19 (14.8)	
Not working or in school	11 (32.4)	83 (64.8)	0.001 ^{b,*}
Age of onset (mean \pm S.D.)	25.3 (9.1)	25.5 (8.1)	NS
Time from onset of psychosis to hospitalization, <i>N</i> (%)			
Less than 1 month	20 (58.8)	16 (12.6)	
1–6 months	13 (38.2)	26 (20.5)	
>6 months	1 (2.9)	85 (66.9)	0.000 ^{c,*}
Premorbid adjustment, mean \pm S.D.	1.01 \pm 0.42	0.97 \pm 0.38	NS
GAF best < admission, mean \pm S.D.	67.1 \pm 11.4	48.2 \pm 12.1	0.000 ^{d,*}
Lifetime substance abuse, <i>N</i> (%)	13 (38.2)	61 (47.7)	NS
Type of hospital: public, <i>N</i> (%)	9 (26.5)	56 (43.8)	NS
BPRS total, mean \pm S.D.	42.0 \pm 10.9	42.4 \pm 9.90	NS
SANS, mean \pm S.D.	1.58 \pm 0.88	2.05 \pm 0.92	0.013 ^e
SAPS, mean \pm S.D.	2.38 \pm 1.00	2.12 \pm 0.94	NS
Full remission, baseline to 6 months, <i>N</i> (%)	15 (of 33) (45.5)	16 (of 114) (14.0)	0.000 ^{f,*}
Schizophrenia or schizoaffective disorder at 6 months, <i>N</i> (%)	10 (of 28) (35.7)	100 (of 114) (87.7)	0.000 ^{g,*}
Full remission, baseline to 24 months, <i>N</i> (%)	19 (of 32) (59.4)	11 (of 105) (10.5)	0.000 ^{h,*}
Schizophrenia or schizoaffective disorder at 24 months, <i>N</i> (%)	16 (of 32) (50.0)	112 (of 122) (91.8)	0.000 ^{i,*}

^a $t=2.1$, $df=160$.

^b $\chi^2=15.4$, $df=2$.

^c $\chi^2=49.7$, $df=2$.

^d $t=8.2$, $df=160$.

^e $t=2.7$, $df=158$.

^f $\chi^2=15.2$, $df=1$.

^g $\chi^2=34.8$, $df=1$.

^h $\chi^2=34.3$, $df=1$.

ⁱ $\chi^2=31.6$, $df=1$.

* Statistically significant at the Bonferroni-corrected *P* level of < 0.0026 (0.05/19).

ity at the height of the psychotic episode, (3) good premorbid social and occupational functioning, and (4) absence of blunted or flat affect. At the 6-month follow-up, of the 28 patients who were re-diagnosed, 63.6% ($N=7/11$) of those without, vs. 17.6% (3/17) of those with good prognostic features were classified with schizophrenia or schizoaffective disorder ($P=0.02$; Fisher's exact test). At the 24-month follow-up, of the 32 cases who were re-diagnosed, 72.7% ($N=8/11$) of those without, vs. 38.1% ($N=8/21$) of those with good prognostic features were reclassified with schizophrenia or schizoaffective disorder ($\chi^2=3.46$, $df=1$, $P=0.063$) and 0% of those without vs. 19% ($N=4/21$) of those with good prognostic features were reclassified with a mood disorder ($P=0.27$; Fisher's exact test).

Finally, we compared the schizophreniform patients to the 42 schizophrenia patients hospitalized within 6 months of the onset of their first psychotic symptom. All of the significant differences reported above continued to differentiate the groups. In addition, there were two other significant findings. First, the recent onset schizophrenia patients were significantly more likely to be hospitalized in a public facility (50%; $\chi^2=4.00$, $df=1$, $P=0.046$). Second, the schizophreniform group had significantly higher scores on the SAPS than the recent onset schizophrenia group ($t=2.1$; $df=73$; $P=0.049$).

On inspection of the entire sample, we found the following rank ordering of mean SAPS scores: schizophreniform patients with onset within 1 month of admission (2.6); schizophrenia with onset greater than 6 months (2.2); schizophreniform and schizophrenia with acute onset (2.1).

4. Discussion

Our results are consistent with the conclusion from the comprehensive review of literature by Strakowski (1994) that schizophreniform disorder is a heterogeneous disorder, comprised of cases of schizophrenia in their early course, atypical cases of affective disorders, and a group with "true schizophreniform disorder." At the 6-month follow-up point, one-third were re-diagnosed with schizophrenia or schizoaffective disorder, similar to the 30% reported by Beiser et al. (1988) at 9-month follow-up. At 24-month follow-

up, half were re-diagnosed with schizophrenia or schizoaffective disorder. This is in contrast to the figure of 100% in the Zarate et al. (2000) series. Most importantly, 19% continued to receive the diagnosis of schizophreniform disorder and did not meet the criteria for schizophrenia or any other psychiatric disorder. This latter group is consistent with Strakowski's category of "true" schizophreniform disorder.

Perhaps because of this heterogeneity, the course of schizophreniform disorder was also more benign than that of schizophrenia. Schizophreniform patients were somewhat, but not significantly, younger than schizophrenia patients, were more likely to be in school or working full time and to have better GAF best scores before admission although there was no difference between the two groups in rates of poor premorbid adjustment. On the whole, the schizophreniform patients were hospitalized earlier in their psychosis than those with schizophrenia, consistent with the requirements of the classification system. The schizophreniform patients had somewhat less prominent negative symptoms at baseline, receiving lower scores than the schizophrenia group on the SANS, although not at a Bonferroni-corrected significant level. Over the 2-year period, the schizophreniform group was more likely to experience a full remission than those originally diagnosed with schizophrenia (59.4% and 10.5%, respectively). In the subgroup of patients with schizophreniform disorder who were later diagnosed with schizophrenia or schizoaffective disorder, 25% (4/16) achieved a period of full remission. Our findings are discrepant from those of Zarate et al. (2000), who reported no significant difference in the 24-month remission rates of the two diagnostic groups, with the remission rates being 100% for schizophreniform disorder and 75% for schizophrenia.

What accounts for the discrepancies in the results of the two studies? The small number of patients with schizophreniform disorder in both studies makes it difficult to pinpoint a definitive reason for the differences in findings. However, it is likely that variations in sampling, response rates, diagnostic practices, and measurement explain much of the difference. These variations are reflected in the relative frequency of schizophreniform disorder and schizophrenia in the two samples. In the Zarate et al. series from the McLean First Episode Project, the total sample of patients with schizophrenia and schizophreniform

disorder was comprised of 40% (12/30) with schizophreniform disorder and 60% (18/30) with schizophrenia. Our sample with schizophrenia and schizophreniform disorder was comprised of 21% (34/168) with schizophreniform disorder and 79% (128/168) with schizophrenia. This difference in proportions, which is statistically significant ($\chi^2 = 5.02$, $df = 1$, $P = 0.025$), cannot be attributed to earlier psychiatric admission in the McLean sample. If anything, recruitment occurred earlier in our study—25% of the schizophreniform cases in the McLean First Episode Project had an onset of psychotic symptoms more than 6 months before admission (Zarate et al., 2000), whereas in our sample, only 3% of such cases had their first psychotic symptoms more than 6 months before admission. Time since onset was remarkably similar for cases of schizophrenia in the two studies (despite the exclusion criterion of an onset of more than 1 year in the McLean study). Assuming that the samples in the two studies were representative of the same population of patients with psychotic disorders, these findings suggest that the McLean diagnosticians might have been more inclined to give a diagnosis of schizophreniform disorder where our diagnosticians would have given a diagnosis of schizophrenia. The assumption that two samples were drawn from the same population, however, might not be justified. The McLean sample was collected from one University Hospital setting, while our sample was drawn from a wide variety of institutions.

Another possible explanation for the differences in the results of the two studies is a difference in the overall focus of the two projects. The McLean project was mainly designed to address hypotheses about affective psychoses, and only 10% of the 301 patients recruited in the study received a diagnosis of schizophrenia or schizophreniform disorder at baseline. By contrast, the Suffolk County study began with a focus on schizophrenia. In order to assemble an unbiased sample, we identified all first-admission patients with psychotic symptoms; of those who were recruited from the hospitals and had genuine psychotic symptoms (628 of the original 695 interviewed at baseline), 25.8% met the criteria for schizophrenia or schizophreniform disorder at baseline. In this regard, it is noteworthy that the outcomes at 24 months also are quite discrepant, with the McLean patients doing far better on average than the Suffolk County patients.

As noted earlier, the small number of patients with schizophreniform disorder in all of the reports makes it difficult to clearly resolve the reasons for variations across studies. However, the accumulating evidence from research on schizophreniform disorder and other transient psychotic disorders with considerable overlap with schizophreniform disorder, (Jørgensen et al., 1997; Mojtabai, 2000; MacCabe and Stromgren, 1975) clearly supports the view that this disorder is heterogeneous. Many cases are later diagnosed as atypical affective psychoses, others as schizophrenia and yet a third group with a transient course and favorable outcome retain the schizophreniform diagnosis and may be said to have “true” schizophreniform disorder (Strakowski, 1994).

Zarate et al. (2000) concluded that “patients with schizophreniform disorder...be classified as having schizophrenia.” Our findings support Strakowski’s proposal that there is a small group with true schizophreniform disorder. This finding echoes earlier work from this and other cohorts on delineating a group of nonaffective acute remitting psychoses with benign long-term course and outcome (Susser et al., 1995). The challenge for future research, thus, is to better delineate the cases of true schizophreniform disorder from cases that later receive a different diagnosis. Also, distinguishing cases that later receive a diagnosis of schizophrenia from those that receive a diagnosis of affective disorders has important treatment implications.

Acknowledgements

This research was supported in part by NIMH Grant 44801.

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