Eur Arch Psychiatry Clin Neurosci (1992) 242:119–121

European Archives of Psychiatry and Clinical Neuroscience

A Follow-up and Family Study of DSM-III-R Schizophreniform Disorder with Good Prognostic Features

F. Benazzi, M. Mazzoli, and E. Rossi

Psychiatry Service, Public Hospital Morgagni, I-47100 Forlì, Italy

Received May 14, 1992

Summary. A follow-up and family study was carried out of 16 first episode DSM-III-R schizophreniform disorder patients with good prognostic features. Mean length of follow-up was 52.3 months. It was found that 62.5% had affective episodes, 31.2% had schizophreniform episodes. No case of schizophrenia was observed. Outcome was good. Morbid risk for affective disorder among first degree ralatives was 25%, morbid risk for schizophrenia was 0%. These findings suggest a link between DSM-III-R schizophreniform disorder with good prognostic features and affective disorder, and no relationship with schizophrenia.

Key words: DSM-III-R schizophreniform disorder with good prognostic features – follow-up – family history

Introduction

DSM-III-R (American Psychiatric Association 1987) introduced a subdivision of schizophreniform disorder (SFD) into cases with and without good prognostic features (GPF), which was not present in DMS-III (American Psychiatric Association 1980). In DSM-III the fundamental feature of SFD was that of a schizophrenia-like illness of less than 6 months' duration. In DMS-III-R this criterion was not altered, but four good prognostic features (GPF) were added (acute onset of psychotic symptoms, good pre-morbid functioning, confusion and absence of flat affect) to identify a subgroup of cases with a tendency toward good outcome.

DSM-III-R SFD with GPF has a clinical picture similar to that of other acute psychoses, like Perris' cycloid psychosis (Zaudig 1990). Ey's bouffée délirante (Ey et al. 1978), DSM-III-R brief reactive psychosis and ICD-10 draft acute polymorph psychotic disorder (World Health Organization 1989). They have in common a number of features with Kasanin's original description of acute schizoaffective psychosis: the acute onset, the presence of an admixture of affective and schizophrenic symptoms, the brief duration (weeks, months) and the complete recovery (Maj 1984). However, the emphasis on the polymorphism and on the variability of the symptomatology, characteristic of these acute psychoses, is not present in DSM-III-R SFD with GPF. Here, instability of the symptomatology is suggested by the symptom "emotional turmoil", which is stated in the text but not in the diagnostic criteria. The clinical picture of these acute psychoses is different from that of schizoaffective psychosis, as defined in DSM-III-R and in ICD-10 draft.

Schizophreniform psychosis, first defined by Langfeldt in 1937, was an heterogeneous entity. Reclassified using DSM-III-R criteria, his original cases included only 14% of SFD (Bergem 1990).

Studies of DSM-III SFD have found an outcome intermediate between affective disorders (AD) and schizophrenia (S), more often closer S than to AD, with a significant proportion of cases evolving into S (Coryell and Tsuang 1985, Opjordsmoen 1991, Retterstol 1991, Gulberg et al. 1990, Moller et al. 1989, Vita et al. 1991, Fogelson et al. 1982, Opjordsmoen 1986, Beiser et al. 1988, Opjordsmoen 1989, Coryell and Tsuang 1982, Coryell and Tsuang 1986).

While one outcome study of DSM-III-R SFD found no correlation between good prognostic features and outcome (Guldberg et al. 1990), a DSM-III SFD study found that recovered cases had good pre-morbid functioning and no blunted affect (which are two good prognostic features) (Beiser et al. 1988). Studies of the risks for AD and S among first-degree relatives of DSM-III SFD probands found that they were similar to those of the relatives of affective probands (Fogelson et al. 1982, Taylor and Abrams 1984, Pulver et al. 1991) or to those of the relatives of schizophrenic probands (Coryell and Tsuang 1982, Kendler et al. 1986). On the whole, these outcome and family studies of DSM-III SFD suggest a closer association with schizophrenia than with affective disorders.

On the other hand, neuroendocrine findings (Targum 1983), brain imaging studies (Katsanis et al. 1991), clinical features (Taylor and Abrams 1984) and suicide risk (Buda et al. 1988) in DSM-III SFD seem to suggest a closer association with affective disorders. The relationship of these DSM-III SFD studies with DSM-III-R SFD with GPF is unclear. Clinical course and family history

Correspondence to: Franco Benazzi

of DSM-III-R SFD with GPF remain to be clarified. Therefore, we carried out a follow-up and family study of first episode DSM-III-R schizophreniform disorder with good prognostic features.

Methods

Identification of probands (cases with a first episode of DSM-III-R SFD with GPF and no previous psychiatric history) was based on a careful review by the authors (senior staff psychiatrists) of the clinical notes of the 4596 patients who had attended the Psychiatry Service of the Public Hospital of Forlì, Italy, from January 1984 to September 1991. The service has a 16-bed, acute, short-term inpatient unit situated in a public general hospital, and an outpatient clinic, serving an urban and rural population of 150.000 people, in the north of Italy. Seventeen psychiatrists are employed in the service. Clinical notes had been collected by senior staff psychiatrists during their work with patients. They were neither collected for research nor in a rigidly structured way. However, they usually contained all the relevant information for a reliable assessment by the authors of each patient's clinical picture. The authors strictly applied DSM-III-R criteria for SFD with GPF to the clinical notes, excluding those which were incomplete or unclear (a minority). Specifically, the following inclusion criteria were required:

1. Acute onset of psychotic symptoms (within 4 weeks of first change),
2. two of the following: delusions, prominent hallucinations, incoherence; or one of the following: bizarre delusions, prominent hallucinations of a voice commenting and conversing; with or without prodromal and residual symptoms,
3. no blunted affect (emotional turmoil),
4. symptoms duration of less than 6 months but of more than 1 month (to exclude cases of brief reactive psychosis), and at least 1 week of psychotic symptoms,
5. good pro-morbid functioning,
6. DSM-III-R criteria for schizoaffective disorder, mood disorder with psychotic features and brief reactive psychosis had not to be met.

The DSM-III-R GPFs considered were acute onset, good pre-morbid functioning and no blunted affect. As in the clinical notes it was not always clearly mentioned, whether the symptom "confusion" was present or not, we preferred to exlude this fourth GPF from the research protocol. Particular attention was paid to exclude cases of DSM-III-R mood disorder with psychotic features. A diagnosis of post-psychotic depression was made if, following resolution of SFD, a DSM-III-R major depressive episode had been observed.

Sixteen cases (outpatients) of DSM-III-R first-episode SFD with GPF were so identified. They became the probands of the study. It was possible to carry out a follow-up and a family study of them all. Once identified, probands and at least one first-degree relative were directly interviewed by the authors, after a mean of 52.3 months from the onset of the first SFD episode. Probands and their first-degree relatives were interviewed with a semi-structured interview based on DSM-III-R criteria (made by the authors) to confirm the diagnosis of SFD and to investigate the occurrence, during the follow-up period, of the following disorders: schizophreniform disorder, major depression, bipolar disorder and schizophrenia. The Global Assessment of Functioning scale (GAF) from DSM-III-R, relative to the last year and to the last month, and the Strauss-Carpenter scale (Strauss and Carpenter 1972), were used as measures of functioning. The Brief Psychiatric Rating Scale (BPRS) (Overall 1988) was used as a cross-sectional measure of psychopathology at follow-up interview. Probands and their first-degree relatives were also interviewed by the authors about psychiatric history of probands' first-degree relatives, using the same semi-structured interview. At follow-up interview, the authors were blind to the proband's psychiatric family history, but they were not blind to the proband's first diagnosis of SFD. Only after conclusion of the proband's interview did the authors interview the proband and his first-degree relatives about psychiatric family history. Proband and relatives were interviewed by single authors and the results of the interview were discussed among them and a consensus reached.

Results

Through clinical notes review 16 cases were found who met DSM-III-R criteria for a first episode of SFD with GPF, giving a frequency of 3.4/1000. Mean age at onset of SFD was 32.5 years (SD 12 years; range 16–52 years). Mean age at follow-up interview was 36.5 years (SD 12 years; range 21–57 years). Mean length of follow-up from onset of the first SFD episode was 52.3 months (SD 25.2 months; range 19–93 months). Seventy-five percent of cases (12/16) were females. The duration of the first SFD episode was between 31 days and 90 days in 75% of cases (12/16), and between 91 days and 180 days in 25% of cases (4/16). All had been treated with neuroleptics, with or without benzodiazepines, usually for less than 1 year, but in some cases for longer. Post-psychotic depression was observed in 37.5% of cases (6/16) and was often treated with antidepressants. No cases of schizophrenia was observed in the study group during the follow-up period.

A total of 20 major affective disorder episodes (AD) was observed in 62.5% of probands (10/16). There were 8 episodes of mania (6 delusional) and 12 episodes of major depression (1 delusional). A total of 8 SFD episodes was observed in 31.2% of probands (5/16), two of whom had a post-psychotic depression. Of the probands, 6.3% did not have any affective or schizophreniform episode. Mean score of the GAF scale was 82.5% (SD 8.5; normal 90) during the last year, and 83.8 (SD 8.8) during the last month, while mean score of the Strauss-Carpenter scale was 14.8 (SD 1.1; normal 16). At follow-up examination mean score of the BPRS was 23.8 (SD 7.4).

The number of first-degree relatives was 86. No cases of schizophrenia, schizophreniform disorder or bipolar disorder was found among them. Eleven first-degree relatives had a history of major depression. We calculated the morbid risk for major depression among first-degree relatives using Weinberg's abridged method, taking the period ranging from 15 to 70 years of age as the risk period for AD (Maj 1991). The morbid risk for major depression resulted to be 25% (affected 11; BZ 44; 95% confidence interval 12.3–37.7%).

Discussion

It is noteworthy that no case of schizophrenia was observed among probands and their first-degree relatives. We believe this is an important point against a relationship between SFD with GPF and schizophrenia.

The observation that 62.5% of probands had typical AD episodes during the follow-up period suggests a relationship between SFD with GPF and affective disor-

ders, as well as age at onset (32.5 years) and female/male ratio (3:1) (Kaplan and Sadock 1990). High GAF and Strauss-Carpenter scales scores and low BPRS scores suggest a good level of functioning during the follow-up period, which is in line with the often good outcome of affective disorders (Coryell and Tsuang 1985; Grossman et al. 1991, Kendler 1991). Also family history findings (25% morbid risk for major depression among first-degree relatives) suggest a close association with affective disorders [the risk for AD among first-degree relatives of affective probands is estimated to be between 10 and 25% (Kaplan and Sadock 1990)]. Our results are at odds with most DSM-III SFD studies (which point to a closer association between SFD and schizophrenia), probably because, by failing to identify a subgroup of schizophreniform patients with good prognostic features, they included many cases of schizophrenia at onset.

To avoid the inclusion of cases of DSM-III-R brief reactive psychosis, we selected SFD probands with symptoms lasting longer than 30 days. Of the probands 75% had a first SFD episode duration of less than 90 days, and it has been suggested that shorter SFD episode duration can be related to good outcome (Coryell and Tsuang 1986).

Finally, some methodological limitations of our study must be considered. First, identification of probands was retrospective and based on clinical notes review. Second, follow-up and family data were collected knowing probands' diagnosis at onset. Third, our semi-structured interview was not validated. However, the rigid application of DSM-III-R criteria and the good quality of most clinical notes may have partly overcome these limitations. Our findings must therefore be considered preliminary. If confirmed by further research, our follow-up and family history findings about schizophreniform disoder with good prognostic features could be relevant from a clinical, prognostic and therapeutic point of view, as they suggest an association between this illness and affective disorders.

References

1. American Psychiatric Association (1980) Diagnostic and Statistical Manual of Mental Disorder (DSM-III) 3rd edn. APA, Washington DC
2. American Psychiatric Association (1987) Diagnostic and Statistical Manual of Mental Disorder (DSM-III-R) 3rd edn revised. APA, Washington DC
3. Beiser M, Fleming JA, Iacono WG, Lin T (1988) Refining the diagnosis of schizophreniform disorder. Am J Psychiatry 145: 695–700
4. Bergem ALM, Dahl AA, Guldberg C, Hansen H (1990) Langfeldt's schizophreniform psychoses fifty years later. Br J Psychiatry 157:351–354
5. Buda M, Tsuang MT, Fleming JA (1988) Causes of death in DSM-III schizophrenics and other psychotics (atypical group). A comparison with the general population. Arch Gen Psychiatry 45:283–285
6. Coryell W, Tsuang MT (1982) DSM-III schizophreniform disorder. Comparisons with schizophrenia and affective disorder. Arch Gen Psychiatry 39:66–69
7. Coryell W, Tsuang MT (1985) Major depression with mood-congruent or mood-incongruent psychotic features: outcome after 40 years. Am J Psychiatry 142:479–482
8. Coryell W, Tsuang MT (1986) Outcome after 40 years in DSM-III schizophreniform disorder. Arch Gen Psychiatry 43: 324–328
9. Ey H, Bernard P, Brisset C (1978) Manuel de Psychiatrie, cinquieme edition. Masson, Paris
10. Fogelson DL, Cohen BM, Pope HG (1982) A study of DSM-III schizophreniform disorder. Am J Psychiatry 139:1281–1285
11. Grossman L, Harrow M, Goldberg JF, Fichtner CG (1991) Outcome of schizoaffective disorder at two long-term follow-ups: comparisons with outcome of schizophrenia and affective disorders. Am J Psychiatry 148:1359–1365
12. Guldberg CA, Dahl AA, Bergem M (1990) Predictive value of the four good prognostic features in DSM-III-R schizophreniform disorder. Acta Psychiatr Scand 82:23–25
13. Kaplan H, Sadock BJ (1990) Pocket handbook of clinical psychiatry. Williams & Wilkins, Baltimore, Maryland, 61–88
14. Katsanis J, Iacono WG, Beiser M (1991) Relationship of lateral ventricular size to psychophysiological measures and short-term outcome. Psychiatry Res 37:115–129
15. Kendler KS (1991) Mood-incongruent psychotic affective illness. Arch Gen Psychiatry 48:362–369
16. Kendler KS, Gruenberg AM, Tsuang MT (1986) A DSM-III family study of the nonschizophrenic psychotic disorders. Am J Psychiatry 143:1098–1105
17. Maj M (1984) The evolution of some european diagnostic concepts relevant to the category of schizoaffective psychoses. Psychopathology 17:158–167
18. Maj M, Starace F, Pirozzi R (1991) A family study of DSM-III-R schizoaffective disorder, depressive type, compared with schizophrenia and psychotic and nonpsychotic major depression. Am J Psychiatry 148:612–616
19. Moller HJ, Hohe-Schramm M, Cording-Tommel C, Schmid-Bode W, Wittchen HU, Zaudig M, von Zerssen D (1989) The classification of functional psychoses and its implications for prognosis. Br J Psychiatry 154:467–472
20. Opjordsmoen S (1986) Long-term follow-up of paranoid psychoses. Psychopathology 19:44–49
21. Opjordsmoen S (1989) Delusional disorders I. Comparative long-term outcome. Acta Psychiatr Scand 80:603–612
22. Opjordsmoen S (1991) Paranoid (delusional) disorders in the light of a long-term follow-up study. Psychopatholgoy 24:287–292
23. Overall JE (1988) The Brief Psychiatric Rating Scale (BPRS): recent developments in ascertainment and scaling. Psychopharmacol Bull 24:97–99
24. Pulver AE, Brown H, Wolyniec PS, McGrath JA, Tam D (1991) Psychiatric morbidity in the relatives of patients with DSM-III schizophreniform disorder: comparisons with the relatives of schizophrenic and bipolar patients. J Psychiat Res 25:19–29
25. Retterstol N (1991) Course and outcome in paranoid disorders. Psychopathology 24:277–286
26. Strass SJ, Carpenter WT (1972) The prediction of outcome in schizophrenia, I: Characteristics of outcome. Arch Gen Psychiatry 27:739–746
27. Targum SD (1983) Neuroendocrine dysfunction in schizophreniform disorder: correlation with six-month clinical outcome. Am J Psychiatry 140:309–313
28. Taylor MA, Abrams R (1984) Mania and DSM-III schizophreniform disorder. J Affective Disord 6:19–24
29. Vita A, Giobbio GM, Garbarini M, Morganti C, Dieci M (1991) Prognostic value of ventricular enlargement in acute schizophreniform disorder. Lancet 338:1458
30. World Health Organization (1989) ICD-10 draft. International classification of diseases: mental and behavioural disorders. WHO, Division of Mental Health, Geneve
31. Zaudig M (1990) Cycloid psychoses and schizoaffective psychoses – a comparison of different diagnostic systems and criteria. Psychopathology 23:233–242