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Unipolar and Bipolar Schizoaffective Disorders: A Comparative Study*

III. Long-Term Outcome

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Summary. Seventy-two schizoaffective patients were investigated longitudinally (mean follow-up period 25.6 years). Long-term outcome of unipolar ($N = 37$) and bipolar ($N = 35$) schizoaffectives was compared. Different aspects of outcome were investigated separately using standardized instruments of evaluation. No differences were found between unipolar and bipolar schizoaffective patients with regard to global functioning (GAS), disability (WHO/DAS) or psychopathological symptomatology at follow-up. There were also no differences in social consequences of the illness, i.e. downward occupational and downward social drift, premature retirement and achievement of the expected social development.

Key words: Schizoaffective disorders – Long-term outcome – Unipolar – Bipolar

Introduction

As we have already shown (Marneros et al. 1989a) bipolar schizoaffective disorders have a worse prognosis with regard to relapse than unipolar schizoaffective disorders. However, "prognosis" is a very general and global term: it can mean the frequency of relapse but also the development or not of residual symptomatology, or the length of episodes, or social consequences, etc. (Marneros et al. 1989b). Therefore the term prognosis has to be understood to include both course and outcome. "Outcome", however, is also used to characterize the psychopathological, psychological and social state of the patient at the time, usually some months or years after onset of the illness (Angst 1980, 1986). That outcome of a mental disorder has many aspects, such as social disability, psychopathological residuum, psychological deficit or social consequences, must also be considered. All these aspects can be differently influenced by the illness. So they have to be separately investigated, avoiding a generalization of the term outcome (Marneros et al. 1989a). The aim of this study was a comparison of the different aspects of the outcome in unipolar and bipolar schizoaffective disorders, avoiding confusion with other elements of the course of the disorder.

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Subjects, Methods and Instruments

The outcome was evaluated by applying the WHO Disability Assessment Schedule (WHO/DAS), the WHO Psychological Impairments Rating Schedule (PIRS), the Global Assessment Scale (GAS) and the Bonn Criteria of Psychopathological Outcome. The social consequences of the illness were estimated by evaluating the variables: downward occupational drift, downward social drift, premature retirement and non-achievement of the expected social development.

Disability Assessment Schedule. The DAS was developed by the WHO (WHO 1979, 1988; Schubart et al. 1986a, b) for the assessment of social behaviour and disability during or after mental illness. "Disability", in this schedule, is defined as a disturbance or loss of the ability to perform specific social functions and roles in the family, at work, and/or in social groups according to the normal expectations of the community (Schubart et al. 1986a).

For every item the interviewer had to rate both intensity and duration (whether present for more or less than one-half of the last 4 weeks). In our population all "disturbed" items

had the maximal duration (present for more than half of the last 4 weeks). The scores finally assigned were the sums of the scores for intensity and duration.

Psychological Impairments Rating Schedule. The PIRS was developed by WHO (Biehl et al. 1986, 1988; Schubart et al. 1986b; WHO 1979) for the assessment of psychological impairments after mental illness. It reflects the opinion of the expert carrying out the observations. Seventy-five aspects of the observed behaviour of the patient are rated, and the ratings are grouped into ten sections. For each item there are three possible ratings (symptom absent, symptom moderate and symptom severe). In addition, in order to enable a more global judgement of the degree of disturbance, in each section an "overall impression" was formulated using a 6-point rating scale (where three steps are operationally defined; Biehl et al. 1988). The PIRS is closely related to the Present State Examination (PSE) (Biehl et al. 1988; Schubart et al. 1986b).

Global Assessment Scale. The GAS, developed by Spitzer and coworkers (Spitzer et al. 1976; Endicott et al. 1976) is a rating scale for evaluating the overall functioning of the subject during a specified period of a continuum from psychological or psychiatric illness to health. The GAS has been shown to be very reliable (Endicott et al. 1976). GAS ratings were found to be more liable to change over time than were other ratings of overall severity or the dimensions of specific symptoms. The relative simplicity, reliability and validity of the GAS make it useful in a variety of clinical and research settings (Endicott et al. 1976).

Bonn Criteria of Psychopathological Outcome. These criteria were developed by Huber et al. (1979) to describe the psychopathological outcome of psychoses. Fifteen subtypes are grouped into three categories: "Full remission", "non-characteristic residua" and "characteristic schizophrenic residua". A summarized English translation of the Bonn criteria is provided in an appendix by Marneros et al. (1986).

Table 1. Global assessment scale (GAS)

Score	Unipolar schizoaffective psychoses ($N = 37$)		Bipolar schizoaffective psychoses ($N = 35$)	
100	43%	54%	40%	49%
91	11%		9%	
90	3%		–	
80	5%		–	
75	–		3%	
71	5%		3%	
70	8%	24%	–	26%
61	–		11%	
60	–		3%	
55	3%		–	
51	–		6%	
50	–		6%	
41	3%		6%	
40	5%	16%	3%	20%
35	3%		–	
31	5%		6%	
–	–		3%	
11	–	5%	3%	6%
10	5%		–	
Chi-square test = 0.265 $df = 3$ n.s.				
Arithmetic mean	77.27		72.85	$P = 0.508$[a]
Median	91		75	$P = 0.562$[b]

[a] *t*-test
[b] Mann-Whitney *U*-test

Results

Global Assessment Scale

No differences between unipolar and bipolar schizoaffective disorders were found with the GAS. The arithmetic mean of the GAS score is 77.27 in unipolar and 72.85 in bipolar schizoaffective disorders (Table 1). Similarly no significant differences were found between the two groups when grouping the GAS finding in four categories according to the severity: (a) no difficulties (score 91–100), (b) moderate difficulties (score 51–90), (c) severe difficulties (score 31–50), and (d) extreme difficulties (score 0–30; Table 1).

Disability Assessment Schedule

For methodological reasons we omitted the items 2.1–2.5 (marital, parental and heterosexual roles, participation in household) and items 2.7–2.9 (occupation or role, interest in and demand for information).

Global Evaluation. No differences between unipolar and bipolar schizoaffective disorders were found regarding section 5 of the WHO/DAS, which reflects the investigator's overall assessment of the patient's social adjustment, taking into consideration all information recorded and rated in the schedule (Fig. 1). However, some differences regarding single items were found, as the next section shows.

Overall Behaviour. We considered here the items of section 1 of the WHO/DAS (overall behaviour) plus two items of section 2 (social role performance). The two rated items of section 2 are (a) friction in interpersonal relationships and (b) emergency or crisis behaviour. Significantly more bipolar than unipolar schizoaffective patients had disturbances of item 1.4 (social contacts/social withdrawal), item 1.2 (friction in interpersonal relationships), and item 2.2 (emer-

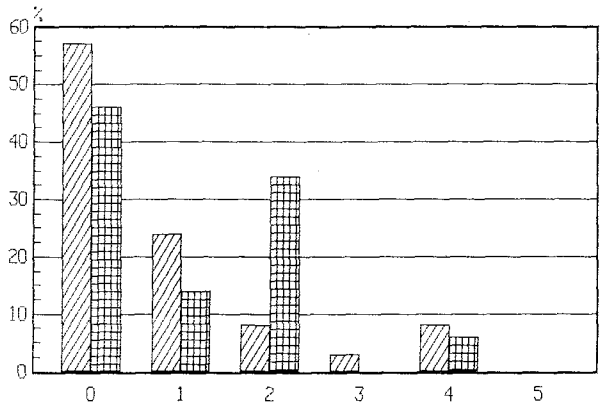

Fig. 1. Disability Assessment Schedule (WHO/DAS): global evaluation. 0, Excellent adjustment; 1, very good adjustment; 2, good adjustment; 3, fair adjustment; 4, poor adjustment; 5, very poor adjustment. Significance: chi-square = 8.37, $df = 5$, n.s. ▦ Unipolar schizoaffective disorders ($N = 37$), ▨ bipolar schizoaffective disorders ($N = 35$)

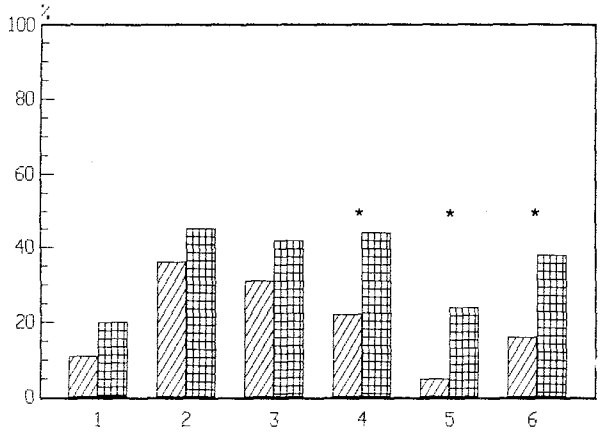

Fig. 2. Disability Assessment Schedule (WHO/DAS): frequency of disturbances (scores '1' and '2'). 1, Self-care; 2, spare-time activity; 3, slowness; 4, social contacts/withdrawal; 5, friction in interpersonal relationship; 6, emergency or crisis behaviour. * $P < 0.05$ (chi-square test). ▦ Unipolar schizoaffective disorders ($N = 37$), ▨ bipolar schizoaffective disorders ($N = 35$)

gency or crisis behaviour). No differences between the two groups were found with regard to the three first items of section 1 of WHO/DAS self-care, spare time activity and slowness; Fig. 2).

The average intensity of the disturbances rated with WHO/DAS did not differ significantly between the two groups, as the comparison of the patients' average score (PAS) of WHO/DAS shows (Table 2). The PAS is the arithmetic mean of all equally weighted items for each individual patient. It shows the severity of the overall general disability referred to by the items rated. PAS value 0 means that the patient does not have any disability, while 5 means

Table 2. Disability assessment schedule (DAS): patient's average score

	Unipolar schizoaffective psychoses ($N = 37$)	Bipolar schizoaffective psychoses ($N = 35$)	
0	19 (51%)	16 (46%)	
0.01–0.50	7 (19%)	2 (6%)	
0.51–1.00	5 (14%)	6 (17%)	
1.01–1.50	1 (3%)	2 (6%)	
1.51–2.00	2 (5%)	3 (9%)	
2.01–2.50	1 (3%)	3 (9%)	
2.51–3.00	1 (3%)	2 (6%)	
3.01–3.50	–	1 (3%)	
3.51–4.00	1 (3%)	–	
Arithmetic mean	0.550	0.838	$P = 0.209$[a]
Median	0.000	0.500	$P = 0.240$[b]

[a] t-test
[b] Mann-Whitney U-test

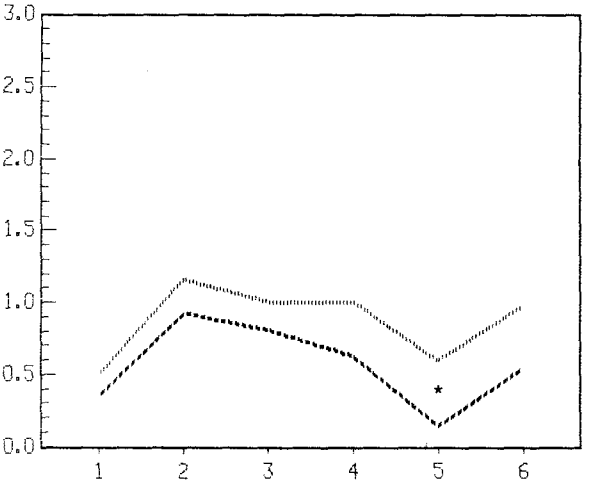

Fig. 3. Disability Assessment Schedule (WHO/DAS): 1, Self-care; 2, spare-time activity; 3, slowness; 4, social contacts/withdrawal; 5, friction in interpersonal relationship; 6, emergency or crisis behaviour. * $P < 0.05$ (Mann-Whitney test). ---- Unipolar schizoaffective disorders ($N = 37$), ····· bipolar schizoaffective disorders ($N = 35$)

maximal severity of disability. To compare the severity of partial functions rated by the various scores, we used the item's average score (IAS) of WHO/DAS. The IAS is the arithmetic mean of the scores of an item rated in the group of patients. Figure 3 shows that only the item "friction in interpersonal relationships" had a higher IAS in bipolar than in unipolar schizoaffective disorders. This means that only this item of behaviour was more severely disturbed in bipolars than in unipolars.

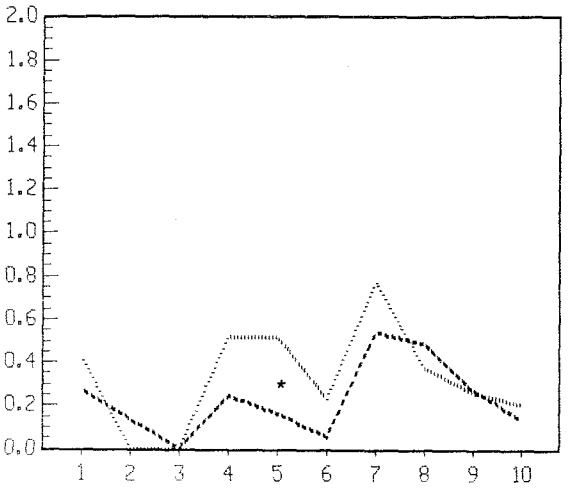

Fig. 4. Psychological Impairment Rating Schedule (PIRS): profile of overall impressions. 1, Slowness/psychic tempo; 2, attention withdrawal; 3, fatigability; 4, initiative; 5, facial expression; 6, body language; 7, affect display; 8, conversation skills; 9, self-presentation; 10, cooperation. * $P < 0.05$ (Mann-Whitney test). ---- Unipolar schizoaffective disorders ($N = 37$), ····· bipolar schizoaffective disorders ($N = 35$)

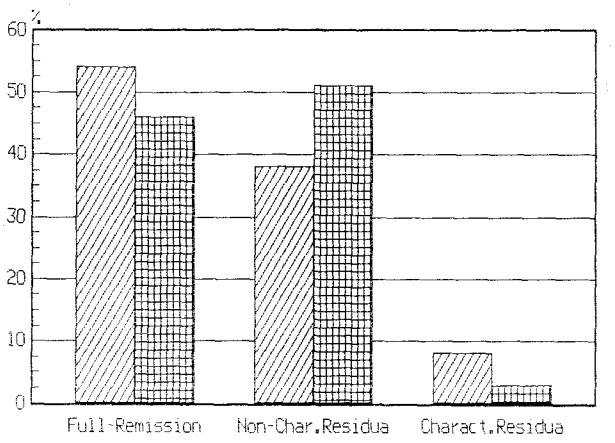

Fig. 5. Bonn criteria of psychopathological outcome (Huber et al. 1979). Significance: chi-square = 1.89, $df = 2$, n.s. ▦ Unipolar schizoaffective disorders ($N = 37$), ▨ bipolar schizoaffective disorders ($N = 35$)

Psychological and Psychopathological Outcome

The psychological aspect of the outcome was estimated by PIRS, and the psychopathological outcome by the Bonn Psychopathological Criteria of Outcome (Huber et al. 1979; Marneros et al. 1986). As in the DAS we estimated an item's average score for the PIRS (IAS-PIRS). The IAS-PIRS was computed for every single one of the ten sections. As shown in Fig. 4, the profiles of the IAS of the PIRS did not differ significantly between unipolar and bipolar schizoaffective disorders with the sole exception of facial expression, which was more disturbed in bipolar schizoaffective patients. Similarly, no significant differences between unipolar and bipolar schizoaffective disorders were found regarding psychopathological outcome (Fig. 5).

Social Consequences of the Illness

In an earlier investigation (Marneros et al. 1989b), we found that four variables can reflect fairly well the social consequences of the disorder after a long-term

Table 3. Social consequences of the mental disorder

	Unipolar schizoaffective psychoses ($N = 37$)	Bipolar schizoaffective psychoses ($N = 35$)	P value[a]
Downward Occupational Drift	($N = 37$)	($N = 34$)	0.2054
Downward occupational drift	9 (24%)	13 (38%)	
No downward occupational drift	28 (76%)	21 (62%)	
Downward Social Drift	($N = 34$)	($N = 35$)	0.9605
Downward social drift	5 (15%)	5 (14%)	
No downward social drift	29 (85%)	30 (86%)	
Premature Retirement	($N = 22$)	($N = 27$)	0.5862
Premature retirement	5 (23%)	8 (30%)	
No premature retirement	17 (77%)	19 (70%)	
Achievement of the Expected Social Development	($N = 37$)	($N = 35$)	0.3527
Non-achievement of the expected social development	9 (24%)	12 (34%)	
Achievement of the expected social development	28 (76%)	23 (66%)	

[a] Chi-square test

course of illness. These variables are: downward occupational drift, downward social drift, premature retirement and non-achievement of the expected social development.

Downward occupational drift is defined as the difference in highest achieved occupational status and the occupational status at the time of the follow-up investigation or, for retired patients, the time of retirement. We considered only those patients for whom downward occupational drift was possible, i.e. those continuously classified as housewives were excluded.

The *downward social drift* was estimated by comparing the patient's original social class (parents' social class) with the patient's social class at the end of the observation time (see also part I). Again we excluded all patients for whom downward drift was impossible because their original social class was already the lowest one.

To define the variable *premature retirement* we excluded all patients with no paid occupation before onset (for instance housewives).

The variable *achievement of the expected social development* reflects the opinion of the interviewer as to whether the patient fulfilled his or her expected social role and whether he or she achieved the social status which would be expected on the base of the status of the family, education and possibilities of upward social drift, etc. As shown in Table 3, there was no significant difference between unipolar and bipolar schizoaffective disorders in any of the social consequences investigated.

Discussion and Conclusions

The question whether unipolar schizoaffective disorders have a better prognosis than bipolar ones, or vice versa, cannot be answered in a general way. From the literature about the prognosis of mental disorders it is clear that the term "prognosis" has various meanings: frequency of relapses, length of episodes, psychopathological residuum symptoms, psychological deficits, or social consequences. As already shown in part II of this study (Marneros et al. 1989a), bipolar schizoaffective disorders had a worse prognosis regarding frequency of relapses than unipolar schizoaffective disorders, as found in affective disorders (Angst 1989).

However, the frequency of relapse is only one aspect of prognosis. The other aspect is the state, which we usually define as "outcome", but outcome also has many aspects. It cannot be estimated only generally; each aspect must be looked at separately. Investigating the aspect "social consequences" as a partial aspect of outcome, we did not find any differences between unipolar and bipolar schizoaffective disorders. There was no difference between unipolar and bipolar schizoaffective disorders after a long duration of the illness (on average about 25 years) in downward occupational and social drift, premature retirement and non-achievement of expected social development. The psychopathological outcome did not essentially differ between the two types of schizoaffective disorder. Similarly, no differences were found with regard to level of functioning estimated by the GAS. However, the GAS scores found in unipolar as well as in bipolar schizoaffective patients of the Cologne study are more favourable than those found in the Zürich study by Angst (1989). We have two explanations for this discrepancy. Angst had a much higher proportion of schizo-dominant patients in his sample than we did in our Cologne study (Angst 1989). The Syndrome Presence Index (SPI) and the Schizo-Affectivity Score (SAS) of our sample show that both the unipolar and bipolar groups displayed a very strong focus on intermediate schizoaffective values, a fact which underlines the very weak bias to a schizo-dominant as well as to an affect-dominant course of the patients in the Cologne study. The second explanation is that we estimated the GAS many years after the last episode (on average 14 years). In Angst's studies, however, the time between the end of the last episode and the evaluation of outcome was shorter than in our study. It is possible that the large time lapse between recovery from an episode and estimation of the GAS leads to more favourable findings than immediate estimation. Evaluating disability according to the definition of the WHO (WHO/DAS, Schubart et al. 1986b; WHO 1988) it can be said that there are no differences between unipolar and bipolar schizoaffective disorders with regard to the frequency of patients having a type of disability (as the global evaluation showed), or to the distribution of the severity of the disability between the two groups (as patients' average score of DAS shows). Nevertheless we found that more bipolars have deficits in social contact, in emergency or crisis behaviour, and in friction in interpersonal relationships. It seems, according to the findings of this study, that the friction in interpersonal relationships is more severely disturbed in bipolar than in unipolar patients.

Altogether it can be said that bipolar and unipolar schizoaffective disorders have some very interesting differences with regard to sociodemographic features; they also differ significantly with regard to the course of the illness, but they do not essentially differ with regard to disability, disturbances of level of functioning, or psychopathological and psychological deficits. If sociodemographic factors, features of

course and response to treatment can be considered as valid criteria, then we can say that unipolar and bipolar schizoaffective disorders are to some extent different groups of illnesses.

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