A 15–20 Year Follow-Up of Adult Psychiatric Patients
Psychiatric Disorder and Social Functioning

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Background. An exploratory study was undertaken of the importance of personality disorder in predicting the long-term outcome for both episodic disorders and social functioning.
Method. In 1966–67, a representative series of patients with children, free of episodic illness for at least one year, was sampled from the Camberwell Psychiatric Register and systematically assessed over a four-year period, using measures of known reliability and validity. Psychiatric disorder was measured using a PSE-compatible instrument. The follow-up after 15–20 years used the PSE and a systematic assessment of social functioning.
Results. Overall outcomes were similar across diagnoses, but an initial categorical diagnosis of personality disorder predicted much poorer outcomes on psychiatric and social measures for patients with unipolar depressive disorders than for those with other diagnoses.
Conclusions. The findings indicate the importance for prognosis of including a systematic assessment of personality disorder in the clinical assessment of patients with depressive disorder.

Long-term follow-up studies of psychiatric disorders are important for clinical practice and for advances in nosology. For the clinician they can provide information on prognosis or test assumptions about the course of disorders that derive from clinical observation. For nosology they provide a means of testing diagnostic distinctions on the basis of consistency in symptom patterns over time and of differences in course and outcome (Kendell, 1989).

Studies of the outcome for adult psychiatric disorders ten or more years after the first episode, satisfying adequate sampling requirements and with systematic diagnoses, are still rare. In addition, for most studies, problems inevitably arise through changes in diagnostic schemes over time, and comparisons between them are further complicated by variations in the initial severity of the disorder and on whether first and subsequent referrals are distinguished.

A strong case has been made for including broader features of social functioning as well as measures of episodic disorder in assessing outcome (Shepherd *et al*, 1989), but the reason for poorer social functioning is hard to assess without data on personality disorder in the original data sets. Since personality disorders, by definition, involve long-term difficulties in social functioning, it is crucial to include some measure of them when considering the outcome of episodic illnesses (Duggan *et al*, 1991). Personality disorder is likely to be an important influence on later social functioning, as well as being a risk factor for subsequent episodes of illness through the life events or difficulties it promotes.

Previous research

Episodic or 'mental state' disorders

We have found no studies that compare the long-term outcome of representative groups of patients with different diagnoses, the great majority of studies being restricted to single or related illnesses. Findings have shown surprisingly little difference between broad diagnostic groupings with regard to the recurrence of episodes of illness or the likelihood of poor subsequent social functioning. Follow-ups of schizophrenic patients have shown remission rates of 22–26% up to 22 years after first admission, and poor social functioning in 25–35% of patients (Huber *et al*, 1980; Biehl *et al*, 1986; Shepherd *et al*, 1989).

Studies of depressive disorders show strikingly similar levels of persistence. The poorest outcomes have been reported by Lee & Murray (1988) in their follow-up of Maudsley depressive in-patients. Over 18 years, almost all subjects relapsed at some time to a severity satisfying Research Diagnostic Criteria for disorder, although 25% saw themselves as essentially free of symptoms or with only minor recurrence. At the other extreme, 34% experienced chronic severe distress and marked social impairment. Similar figures have been reported for an in-patient sample in Sydney (Kiloh *et al*, 1988; Andrews *et al*, 1990), but, whereas Lee & Murray's sample showed a high rate of other psychiatric problems in later years, this was not so for the Sydney group. In both studies the prognosis became poorer as psychotic symptoms worsened.

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We have found only one long-term study of patients with anxiety disorders. In a prospective study over six to eight years of 40 patients with anxiety disorders, Krieg *et al* (1987) found at follow-up over half with chronic and severe symptoms and only one-third free of marked symptoms. Sixty-seven per cent had severe difficulties across most social role areas.

Long-term natural history of personality disorders

As yet there are few long-term follow-up investigations of personality disorders using current criteria (Costa & McRae, 1986; Drake & Vaillant, 1988). Moreover, predictions have usually been made to continuity in the *same* disorder, narrowly defined, rather than to a wider range of outcomes. Stone (1993) reviewed the follow-up data, especially on his own series of patients with borderline personality disorder, over 10–30 years. Two-fifths had continuing clinically ratable personality difficulties, and the group as a whole showed poorer social functioning on interpersonal indicators such as stable co-habitations or family formation.

Episodic disorders and personality disorders

Recent studies have shown the substantial co-morbidity between episodic and personality disorders (Vize & Tyrer, 1994). In clinic samples this may apply to half or more of patients (Rutter & Quinton, 1984; Friedman *et al*, 1987). In a study of personality disorder in a sample that combined a general-population group and the relatives of psychiatric patients, Zimmerman & Coryell (1989) found those with a diagnosis of personality disorder showed a range of Axis I disorders as well, including major depression in 38% of cases.

Personality disorders and the outcome of episodic disorders

Studies of the relevance of personality to the prognosis of episodic disorders have predominantly examined the importance of personality *traits* rather than of a categorical psychiatric diagnosis of *disorder*. The most frequently repeated finding on personality traits has been an association between high neuroticism or introversion scores, as measured on the Eysenck Personality Inventory (EPI) or some related instrument, and poorer outcome in affective disorders (Weissman *et al*, 1978; Charney *et al*, 1981), even over 18 years (Duggan *et al*, 1990). One earlier study did use a categorical clinical rating of "abnormal premorbid personality". This was the 4–6-year follow-up by Greer & Cawley (1966) of Maudsley patients with neurotic disorders. They found a much poorer outcome on symptoms and social functioning for patients with abnormal pre-morbid personalities.

The issue of whether the personality features associated with episodic disorders are state dependent, a consequence of the episodic illness, a distinct aspect of functioning, or a reflection of a common underlying pathology remains unresolved (Akiskal *et al*, 1983; Docherty *et al*, 1986). It seems unlikely that there will be an answer to this question that will encompass all forms of episodic disorder or abnormal personality feature or type (Rutter, 1987; Vize & Tyrer, 1994), but long-term prospective studies including both axes are an essential strategy for approaching this issue.

None of the studies of episodic or personality disorder reviewed above focused on the relationship between the two in predicting the outcome for either. In this paper we examine the psychiatric and social outcome after 15–20 years for a representative sample of adult in- and out-patients with and without personality disorder, as defined on clinical criteria current in 1966.

Method

Sample

Original study

In 1966–67 an epidemiologically based representative sample of 137 adult psychiatric patients was collected using the Camberwell Psychiatric Register (Wing & Hailey, 1972) as part of a study of the effects of new parental mental disorder on children (Rutter & Quinton, 1984). This sample included a two-in-five random sample of a consecutive series of in- and out-patients with children under the age of 15 years, who had had no contact with psychiatric services for at least one year, and for whom English was the main language spoken at home (*n* = 84). In order to increase the numbers in key cells, this series was supplemented with a further consecutive series of 53 male patients and patients with psychoses. Both series of patients were ascertained in the same way. The total sample was thus representative within sex and diagnostic subgroups. However, since the sampling criteria were intended to omit those patients with chronic disorder – as indicated by regular hospital contacts – the sample was representative only of those patients experiencing a new episode.

Clinical and social data were collected in separate interviews with patients and spouses as soon as possible after the new contact with services, and then

at yearly intervals over the following four years, a total of five assessment points (Rutter & Quinton, 1984).

Follow-up

The follow-up study of the patients was secondary to a follow-up of their children, with the follow-up taking place when the children were between the ages of 21 and 28.

In order that the children's follow-up should be based on adequate data concerning their childhood psychiatric state, six cases with extensive missing data in the original study or where all children were too young at that time for an assessment were omitted. Three of the remaining sample of 131 patients had died during the course of the original study and a further 12 by the time of follow-up. Death certificates were obtained on all of these. Information was available on 98 of the 116 remaining patients. This came from 83 direct interviews, 14 interviews with spouses or children, and the current case notes from one patient with chronic illness. The mean age of male patients at follow-up was 53.9 (s.d. 7.5), and female patients 49.9 (s.d. 8.7). Eighteen patients were untraced or refused to be interviewed. Possible biases in the studied sample were examined and no statistically significant differences were found on either clinical or social variables between the patients for whom follow-up data were available and those who were not recontacted or had died. However, those with poor marriages in the original study were somewhat more likely to have refused or remained untraced.

Measures of disorder

The assessment measures were chosen to maximise comparability of categorisations and criteria between the original and follow-up studies. However, revision of the original classifications was inevitable because of changes in diagnostic schemes and criteria.

Original study

Episodic disorders. Psychiatric diagnoses in the original study were made on a systematic clinical interview covering 32 clinical symptoms and 14 symptom-related behaviours as manifested in the family context (e.g. overt misery, social withdrawal, irritability), together with information on psychiatric history and social functioning from both the patient's and spouse's accounts. This interview (the Family Illness Study (FIS) instrument) was developed in parallel with the early versions of the Present State Examination (PSE; Wing *et al*, 1974) and shared similar interviewing methods, symptoms definitions and cut-off points, although the PSE covered more symptoms.

Personality disorders. A diagnosis of personality disorder required evidence of a pervasive and persistent pattern of maladaptive interpersonal functioning from at least early adolescence not explicable in terms of any recognisable mental illness, and was originally divided into antisocial, schizoid, depressive, anxious, obsessional and immature/inadequate categories.

Follow-up

Episodes of psychiatric disorder and the pattern of social functioning were rated for the five years before the follow-up interview. The measures were as follows.

Episodic psychiatric disorders. An episode was rated if the patient had contacted a psychiatrist either as an in-patient or an out-patient during the previous five years, or if there was a period greater than two weeks during which he or she reported social-role impairment (e.g. time off work, marital difficulties, reduction in social activities) associated with psychiatric symptoms. Because of its similarity to the FIS instrument, the PSE was used to make diagnoses of episodic disorders, using the CATEGO computer-scoring system (Wing *et al*, 1974). The pattern of illness was rated as 'episodic' if there was at least one year free of impairment between episodes, and 'persistent' if impairment was more persistent than this.

Personality functioning. Personality disorder was not reassessed at follow-up because there are no standard criteria that allowed this diagnosis to be made in the absence of data on life history, and to include information covering the time of the first study would have made predictions tautological. Rather, the assessment at follow-up was based on a systematic assessment, using predefined criteria, of impairment in the patient's functioning in work, intimate relationships, day-to-day coping and patterns of social life outside the family, regardless of the presence or otherwise of episodic psychiatric symptoms. 'Episodic' impairment was rated if there was role impairment in one or more areas for less than half of the assessment period. 'Single-role' impairment was rated if there was impairment in a single role area for more than half of the time, and 'major' impairment was rated if there was impairment in more than one role area for one-half or more of the assessment period.

Comparability of diagnostic schemes at both points

Episodic disorders

It was necessary to check the diagnoses in the original study because of the differences in the symptom list

and method of diagnosis between those data and the PSE. This was done first by checking whether CATEGO produced comparable diagnoses on the follow-up data when restricted to the symptoms included in the FIS measure. This proved to be the case although, naturally, the Index of Definition from the PSE was not comparable. Following this, CATEGO was applied to the original data and the resulting diagnoses compared with the original assessments. The differences between the two schemes were then examined. Discrepancies arose because: CATEGO did not give a diagnosis because of insufficient symptoms; the primary FIS diagnosis was alcoholism or personality disorder, categories not assigned by CATEGO; FIS diagnoses took account of psychotic symptoms occurring during the current episode but before the three-month assessment period on which symptoms were rated; and assignment to anxiety disorders or depressive illness varied because of the weight given to depressed mood in the two schemes.

All patients with discrepant diagnoses were reviewed and diagnoses changed to accord with PSE principles. Some patients with personality disorders or alcoholism did not receive episodic diagnoses.

Personality disorders

Recent discussions of the classification of personality disorders have suggested that the schizoid and anxious diagnoses should be treated as manifestations of their associated episodic disorders, and the remaining disorders grouped into two broad categories (Rutter, 1987; Tyrer, 1988), the first category including actively disruptive and manipulative disturbances in personal relationships ('dramatic' disorders), and the second covering disorders characterised by passive, immature or inadequate social-role performance (an 'avoidant/dependent' group).

The files of all patients were reviewed and patients reclassified according to this scheme. Personality disorder was rated if there was evidence of persistent impairment in at least two of three areas: intimate ('marital') relationships, work, and relationships with friends. In nearly all cases there was evidence that pervasive problems had been present from adolescence, but personality disorder was also rated if the patient's adult functioning showed evidence of marked pervasive problems before the original study, in the absence of episodic illness. Patients with alcoholism were not assigned to personality disorders unless they met the criteria, but all of the 11 patients with alcoholism also received a designation of personality disorder.

Table 1
Revised diagnostic classifications (%)

	Men (n = 57)	Women (n = 74)	Total (n = 131)
Episodic disorder			
no episodic disorder	21	5	12
psychosis	12	18	15
depression	49	70	61
anxiety state	16	7	11
other disorders	2	0	1
	$\chi^2 = 13.16$, d.f. $= 4$, $P = 0.011$		
Personality disorder			
no disorder	53	78	67
dramatic group	37	18	26
avoidant/dependent	10	4	7
	$\chi^2 = 9.75$, d.f. $= 2$, $P = 0.008$		
Alcoholism			
none	73	92	84
heavy drinking	9	7	8
alcoholism	18	1	8
	$\chi^2 = 12.09$, d.f. $= 3$, $P = 0.007$		

The distributions of the revised original diagnoses for the 131 patients in the follow-up study are given in Table 1. Men were significantly more likely than women to be given diagnoses of personality disorder, and for this to be the only diagnosis they received. Women were more likely to be diagnosed as depressed and men as showing anxiety states but the frequency of psychoses was similar for both sexes.

Results

The overlap between episodic and personality disorders

The overlap of episodic and personality disorders at the initial study key contact is given in Table 2.

Table 2
Overlap of episodic and personality disorders

	Episodic disorder			
	Psychosis	Depression	Anxiety	None
Men[1]: no.	7	28	9	12
Personality disorder: %				
none	71	61	67	–
dramatic group	29	29	11	92
avoidant/dependent	–	11	22	8
Women: no.	13	52	5	4
Personality disorder: %				
none	92	82	80	–
dramatic group	0	15	20	100
avoidant/dependent	8	4	0	0

No statistically significant differences by diagnosis.
1. One man with a diagnosis of 'other' (compulsive gambling) omitted.

In this table 'psychosis' includes schizophrenia, puerperal psychoses and bipolar disorders. Unipolar affective psychoses were assigned to the 'depressed' group because of the generally mild nature of their psychotic features. There were no statistically significant differences between the episodic classifications on whether patients also showed personality disorder, but for all episodic diagnoses men were more likely than women to receive a designation of personality disorder (NS).

Outcome at 15–20 years

Deaths

Sixteen of the total original sample of 137 patients had died by the time of follow-up. Three of these deaths occurred during the original study period, including the only established suicide. One further patient died in circumstances that suggested the possibility of self-harm, but he was within the group of six patients excluded from the follow-up. Three other deaths appeared to be due to the physical consequences of alcohol abuse. The remainder were natural deaths for a variety of physical ailments.

Episodic diagnosis

Patients in the depressed group showed a significantly better outcome than the other three groups on the recurrence of episodic symptoms and on the probability of pervasive and persistent social impairment (Table 3). The low cell numbers for the other diagnostic group make firm conclusions difficult, but it is noteworthy that a third of patients with anxiety disorders did poorly on both measures. Conversely, apart from the psychotic group, half or more of

Table 3
Outcome of episodic disorders

	Episodic diagnosis			
	Psychosis	Depression	Anxiety	None
Psychiatric episodes in				
past five years: no.	15	58	9	11
none: %	33	67	56	55
episodic: %	33	17	11	0
persistent: %	33	16	33	45
	$\chi^2 = 11.53$, d.f. = 6, $P = 0.07$			
Role impairment in				
past five years: no.	15	58	10	12
none: %	20	51	40	8
episodic: %	20	8	10	0
single role: %	13	22	0	33
persistent: %	47	19	50	68
	$\chi^2 = 20.93$, d.f. = 9, $P = 0.012$			

patients experienced no impairing episodes of illness in the five years before the follow-up interview. The patients originally diagnosed as having personality disorders without accompanying episodic disorder showed significantly poorer social functioning than patients with any other diagnoses, with the majority showing persistent and pervasive role impairment. Strikingly, in nearly half of the cases this pervasive impairment was accompanied at follow-up by clear episodic symptoms.

The consistency of diagnoses across time was examined using the CATEGO-derived follow-up diagnoses for those patients who had an episode at an Index of Definition level of 5 or higher in the 12 months before interview, regardless of the level of handicap, together with summary diagnostic ratings made from the interview data or from case notes for episodes in the five years but outside the past year. The majority of these cases were patients with chronic conditions controlled by medication. Patients on whom information was only available from children or spouses were not included in this analysis. The results, by diagnosis, were as follows.

Schizophrenia/paranoid state. Of the eight patients with schizophrenia, five retained that diagnosis at follow-up, one was diagnosed as having a neurotic depression, and two were free of disorder. The original diagnosis in the subject with depression at follow-up had been of a paranoid state, as was also the case for one of the two in this group who were free of symptoms. Follow-up data were available on two of the three patients with puerperal psychoses, one of whom had no disorder and one of whom was classified as suffering an anxiety state.

Bipolar disorder. Three of the four patients in this group received diagnoses at follow-up: two were on lithium and chronically handicapped by their condition, and one other was classified as depressed by CATEGO, but an examination of the case material indicated that his diagnosis had not changed, a fact confirmed by his continuing use of lithium.

Unipolar depressive psychosis. Only two of the seven patients in this group showed any disorder at follow-up: one showed an anxiety disorder and the other alcoholism without other symptoms.

Unipolar depression. Twenty out of 48 depressed patients received follow-up diagnoses. Eleven showed the same disorder as at first contact, five had anxiety disorders, and one was alcoholic. One developed chronic and profoundly handicapping schizophrenia, one had had a recent episode of mania, and one was classified as having a borderline psychotic state. In both of these last two cases CATEGO assigned them to new diagnoses on the basis of brief but ratable incidents of elevated mood and hallucinatory experiences.

Anxiety and panic. Four of the nine patients with anxiety diagnoses originally had had episodes in the five years before the follow-up. Only one of these was classified as anxious. The other three were placed in the neurotic depression group.

In summary, although the great majority of patients with disorders at follow-up showed illnesses similar in type to their original diagnoses, there was only modest stability over time in the classifications made within the neurotic depression and anxiety disorder groups.

Personality disorders

The poor outcome for personality disorders was confirmed when all patients with a personality disorder, whether accompanied by an episodic disorder or not, were considered. Only 17% of those without personality problems showed pervasive or persistent role impairment, whereas over half of the dramatic group and all of those in the small group of non-dramatic personality disorders did so. None in this group, and only 16% in the dramatic group, were free of impairment at follow-up compared with over half of those without a rating of personality disorder ($\chi^2 = 27.50$, d.f. $= 6$, $P < 0.0001$). Patients with alcoholism also had poor outcomes, but the poor outcomes for personality disorder were not explained by the overlap with alcoholism. Of the eight alcoholics for whom outcome data were available, three had died from alcohol-related problems, and of the remaining five, two showed persistent handicap in a single role area and three showed pervasive handicap. However, the proportion of those in the 'dramatic' group but without alcoholism who showed pervasive handicap (50%) was comparable to that of the alcoholics.

Episodic disorders and personality disorders

The next question was the extent to which the poor outcomes among the episodic diagnoses were explained by associated personality disturbance (Table 4).

For the patients in the psychotic or anxiety groups the absence of personality disorder did not decrease the risk of episodic illness 15–20 years later. The findings were different for the depressed group. Only one-quarter of the patients in this group without personality disorder had some episodic symptoms over the previous five years and only 7% showed persistent illness. When personality disorder was present, the likelihood of further episodes of illness was high (46%) and at a similar level to the other groups.

Finally, it was necessary to check whether the poorer prognosis for those with personality disorders was simply a reflection of severity or chronicity of disorder more generally. A check on the outcome of episodic disorders in the absence of personality disorder showed no significant associations with the length or severity of the original presenting episode. Therefore, it seems unlikely that the poorer outcomes from personality disorder are to be explained simply as consequences of the length or clinical severity of the associated episodic illness.

Overall outcome of episodic illness

In order to have a complete picture of the prognosis of disorders and the extent of differences between diagnoses, it is necessary not only to consider the persistence of impairment, but also to examine differences in the extent of the remission of all symptoms. To do this, a summary outcome measure

Table 4
Episodic disorders and outcome with and without personality disorders

	No personality disorder	Personality disorder	Statistical significance		
			χ^2	d.f.	P
% with persistent illness at follow-up					
Other diagnosis					
psychosis	33% (4/12)	33% (1/3)	0.47	1	NS
depression	7% (3/45)	46% (6/13)	9.17	1	0.005
anxiety	29% (2/7)	50% (1/2)	0.08	1	NS
% with persistent role impairment at follow-up					
Original diagnosis					
psychosis	42% (5/12)	68% (2/3)	0.02	1	NS
depression	7% (3/45)	62% (8/13)	20.23	1	0.0001
anxiety	43% (3/7)	67% (2/3)	0.01	1	NS

was constructed for the five years before the follow-up, including the presence of minor symptoms, the use of psychotropic drugs, and alcohol misuse (over and above alcoholism), as well as the ratings of psychiatric episodes and role impairment. Patients were rated as: *well* if there were no problems on any of these measures; *predominantly well* if they were without role impairment but reported some minor symptoms; *intermediate* if there was definite role impairment with or without psychiatric symptoms but for less than half of the past five years, or more persistent problems in a single role area – usually marriage; and *poor* if there was persistently poor social functioning in more than one role area, with or without episodic symptoms, or if death was due to suicide or to physical illness related to alcoholism. Comparisons on this measure were restricted to the patients without personality disorder because it was so strongly predictive of a poor outcome, regardless of the episodic diagnosis.

It is clear from Table 5 that the conclusions from the comparisons on the individual measures of psychiatric episodes and role impairment also apply when attention is focused on the association between the original diagnosis and complete remission of symptoms or the occurrence of minor symptoms only. The depressed group were significantly more likely to be free of impairment at follow-up than either the psychotic group or those with anxiety disorders. Further, when the disorders in the depressed group were divided into those with and without an admixture of anxiety, over two-fifths of patients with disorders not involving anxiety were completely free of symptoms over the five years before follow-up. This included the small group of patients with unipolar affective psychoses. The outcome was different for those with an admixture of anxious symptoms, none of whom showed complete remission. The overall outcome for these anxious depressed patients was generally similar to those with unipolar affective psychoses, except that

Table 5
Diagnosis and overall outcome (excluding personality disorders) (%)

	Psychosis ($n = 12$)	Anergic or psychotic depression ($n = 26$)	Anxious depression ($n = 29$)	Anxiety ($n = 8$)
Well	17	42	0	12
Predominantly well	8	19	50	25
Intermediate	33	31	45	25
Poor	42	8	5	38

$\chi^2 = 26.51$, d.f. $= 9$, $P = 0.002$.

complete remission was more likely for the latter. The patients with anxiety disorders were significantly more likely than these two groups combined to have a poor outcome and somewhat less likely to show complete remission or to remain predominantly well.

Discussion

Three main conclusions are suggested by these data. First, they provide strong evidence for the value of a categorical diagnosis of personality disorder based on pervasive abnormalities in social functioning, and for a broad vision of such disorders into 'dramatic' and 'dependent/avoidant' types. Personality disorder proved to be a particularly strong predictor of the recurrence of depression. There are several competing models for this association (Klein *et al*, 1993), and further research needs to focus on testing the possible causal hypotheses. Second, the findings confirm the importance of taking broader aspects of social functioning into account when assessing the outcome of all psychiatric disorders (Shepherd *et al*, 1989). Third, although there were too few patients in some diagnoses for firm conclusions, the findings support those from other studies concerning the outcome for episodic disorders.

Patients with schizophrenia or paranoid states showed a somewhat better outcome than commonly supposed, with little evidence for a progressive decline in functioning from the levels evident 15–20 years earlier. The four patients with bipolar illness showed generally poor functioning. Three-quarters of patients in each of these diagnostic groups were maintained on medication. The outcome for patients in the depressed group lay between those reported by Nystrom (1979) and those in the Lee & Murray (1988) and Kiloh *et al* (1988) series. These differences may be explicable through sampling criteria as well as the placement of the bipolar disorders in the 'psychotic' group in our analyses. Unlike the other two series, our sample contained both in- and out-patients, omitted the chronically ill and patients without children. Thus, it almost certainly contained a smaller proportion of severely ill patients. This interpretation is consistent with the data on suicide. Thus, even if the one possible suicide in our series is included and the comparison restricted to depressive illness, the rate in the full sample (2%) was much lower than those reported by Lee & Murray (1988) and by Kiloh *et al* (1988), where the proportions were 10% and 7%, respectively.

However, sampling variations do not explain all the differences. Although the four patients with bipolar affective disorders in our series had poor outcomes, the patients with unipolar depressive illness

of psychotic intensity or with anergic depression had the best outcome of all the episodic illnesses, provided that personality disorder was not also present. These findings do not accord with Lee & Murray's or with Kiloh *et al*'s findings. In both these studies endogenous depression had a poorer prognosis than neurotic illness, although in the Maudsley (former) series the prediction was much poorer if trait neuroticism was present, whereas in the Sydney (latter) series personality features were predictive for neurotic but not endogenous depression. These differences may reflect variations in the inclusion criteria for endogenous illness as well as differences in initial severity between our own and the other two series. The differences according to the presence or absence of adverse personality features are also likely to be explained by variations in measurement, especially of personality functioning. Thus, 26% of our depressed group were rated as having personality disorder using criteria based on pervasive social dysfunction, compared with 27% in the Maudsley series rated on DSM–III (APA, 1980) definitions, and no less than 64% in the Sydney series according to ICD–9 criteria (WHO, 1978).

There were too few patients with bipolar disorders in our sample to allow any conclusions to be drawn concerning the psychotic–neurotic continuum. Nevertheless, it should be noted that the outcome for those with bipolar illnesses was markedly different from those with unipolar depressions of psychotic intensity who, indeed, were the group with the best prognosis. The difference between these two diagnoses appeared to remain whether or not personality disorder was or was not present. The absence of personality disorder appeared to make no difference to the generally poor outcome of the bipolar group, whereas the unipolar disorders had a poor prognosis only when personality disorder was also involved.

Anxiety and outcome

The prognosis for those with depressive disorders that did not have an anxious component was more favourable than for those disorders with an admixture of generalised anxiety. However, the course of the latter illnesses was also relatively benign. Although none in this group was free of symptoms in the five years before follow-up, they mostly showed a recurrence of only minor symptoms, or some short-lived episodes of role impairment during this period. The prognosis for both the anergic and the anxious depressions was markedly poorer when there was associated personality disorder, a finding in accord with the findings from the Sydney series. Strikingly, 38% of the small number of patients with

anxiety or panic disorders showed a poor outcome at follow-up, regardless of the presence or absence of personality malfunction, and as poor as that for the psychoses. That this is not a chance finding is suggested by the similarly poor outcomes in the study by Krieg *et al* (1987).

The nosological implications of the differences in outcome according to the presence or absence of anxiety are unclear. The findings from the existing long-term follow-up studies do not yet provide the evidence to allow a choice on whether the component of generalised anxiety is a personality substrate or a comorbid episodic disorder. At present, however, the evidence points more towards the first of these alternatives. The follow-up of Maudsley depressive patients, for example, showed few differences in outcome overall across subtypes of depressive illness, but a poorer outcome for melancholia when associated with trait neuroticism (Duggan *et al*, 1991). This finding is broadly consistent with ours. Nevertheless, this issue will not be clarified until there are long-term studies with more sophisticated measurement of state and trait anxiety and their relationship to personality functioning.

Course of personality disorders

Finally, we can consider the question of the improvement in function for those with a designation of personality disorder 15–20 years earlier. It is clear that those whose personality functioning was characterised by passive, avoidant or inadequate role functioning, had a particularly poor outcome, *all* the patients in this group showing pervasively poor social functioning at follow-up. The avoidant and dependent characteristics of this group are similar to those of the "general neurotic syndrome" described in the two-year follow-up of neurotic patients by Tyrer *et al* (1992), and also predictive of very poor outcomes. Compared with this 'avoidant/dependent' group, the outcome for those with a designation of 'dramatic' personality disorders was more varied. Just over half of them also showed poor functioning, and a small proportion, 14%, of this group (four patients) were rated 'well' or 'predominantly well' on overall outcome. Improvement did not appear to be related to whether there was also an episodic diagnosis initially. This makes it less likely that the patients who improved were misclassified on personality disorder. Rather, it may be that the improvement reflects the attenuation of personality malfunction with age for patients in the 'dramatic' group, a process suggested for some disorders of this type (McGlashan, 1986). However, it may also be that social factors were implicated in the improvements in

these patients and in the reduction of pervasive malfunction to not more than a single-role problem area for nearly half of those with dramatic personality disorders. Social influences on the course of both episodic and personality disorders are considered in a companion paper.

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