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STABILITY OF PSYCHIATRIC DIAGNOSIS

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SUMMARY

Eighty five charts of patients whose diagnoses have changed at least once between 1977 and 1981 (unstable) were compared with another randomly chosen charts where diagnosis during the subsequent admissions remained unchanged (stable). Seventy six percent of the changes occured from one to the other diagnostic category and remained so. Seventy three percent of Schizophrenics, 77.5 % of Manics, 45% of Depressives and only 31% the Neurotics retained their original diagnosis. More Schizophrenics became Manics rather than the reverse. No statistically significant differences were found regarding changes between the other diagnostic categories. Unstable group had lesser frequency of admissions before the index admission and were more often readmitted.

Reliability of Psychiatric Diagnosis has often been established by simultaneous observations by two raters. The other approach has been to establish the reliability of life time diagnosis between long and short intervals. Reliability of life time diagnosis was found to be high in situations where the subjects were interviewed twice at two different points separated by 6-7 months (Mazure & Gershon, 1979; Andreasen *et al.*, 1981). The utility of diagnostic classifications depends not only on rater's agreement at a given moment but also on diagnostic stability over time as well. Comparisons between diagnoses assigned to patients on successive admissions or at widely separated points of time have been done less frequently. Such studies would help to establish validity of different diagnostic categories.

Certain earlier studies (Babigian *et al.*, 1965; Odegrad, 1966; Cooper, 1967) reported that diagnostic categories changed quite often, and as high as 54% of the diagnosis was unstable. The diagnosis of Schizophrenia was possibly more stable. Kendell (1974) in a recent study, has reported that four major categories-Depressive Illness, Schizophrenia, Dementia and Alcoholism had a stability around 70 percent, others being below 50 percent. The stability rose to 78-98% during follow up (varying between 5-40 years) when semistructured proforma and specified diagnostic criteria was used (Winokur, 1974; Tsuang *et al.*, 1981). The present study examines the diagnostic changes of 167 patients over a period of 3-5 years.

MATERIAL AND METHODS

We selected those patients who were admitted in 1977 (Jan-Dec) and again readmitted at least once more between January 1977 and December 1981 to our hospital. Out of a total of 341 such cases there were 85 patients (henceforth called the unstable group) whose diagnosis changed at least once from the index diagnosis as given in 1977. Their charts were reviewed and compared with a group of randomly chosen 88 patients (Control group) whose diagnosis remained stable over successive admissions. The charts were screened on the following parameters.

i) demographic variables
ii) duration of illness during the time of index admission
iii) total number of readmissions after

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1977

iv) total number of admissions before 1977

v) diagnostic changes between the index admission and the last admission

vi) frequency of diagnostic changes (ever)

RESULTS

Charts of four patients in the stable group and two in the unstable group could not be scored because of various reasons. Twenty five percent of all admissions underwent major diagnostic revisions. The two groups were not different as regard their age distribution. Fifty two percent of the stable group and 60 percent of the unstable group were within the age group of 16-30 years. The stable group had more males ($X^2=7.48$, $p<0.01$) and a greater number of single individuals ($X^2=5.4$, $p<0.05$). There was no difference between the two groups as regards their duration of illness during the index admission (Table 1). Table 2 indicates

TABLE 1. *Duration of Illness.*

Duration	Stable	Unstable
Upto 7 days	11 (13%)	12(15%)
7 days-1 month	29 (35%)	38(47%)
1-3 months	12 (14%)	16(20%)
3 months-2 years	16 (19%)	8(10%)
2 years +	16 (19%)	7(9%)
Total	84	81

$X^2=7.96$, d.f.=4, N. S.

that the unstable group was more often readmitted and had fewer admission before 1977 (Table 3).

TABLE 2. *Total number of Readmission.*

Readmissions	Stable	Unstable
1	58 (69%)	39 (48%)
2	20 (24%)	21(26%)
2+	6 (7%)	22(26%)
Total	84	82

$X^2=14.69$, d.f.=2, $p<0.01$.

TABLE 3. *Total number of admissions Before* 1977

Admissions	Stable	Unstable
Nil	23 (28%)	33(40%)
1	21 (25%)	31(37%)
2	19 (23%)	9(11%)
2+	20 (24%)	10(11%)
Total	83	83

$X^2=31.60$, d.f.=3, $p<.001$

According to our criteria a diagnosis (ICD 9) of Mania changing to Depression was not a significant change. Same was true for subtypes of Neurosis. But a change from Schizophrenia to Mania or Psychosis to Neurosis were considered significant. Table 4 shows

TABLE 4. *Type of Diagnosis changed*

A-B	: 63 (76%)
A-B-A	: 5 (6%)
A-B-C	: 6 (7%)
More complex reverting to A	: 3 (4%)
More complex not reverting to A	: 6 (7%)
Total	83

TABLE 5. *Diagnostic changes.*

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Final Diagnosis.	Schizo phrenia (Total 85)	Mania/ Hypomania (Total 31)	MDP (D) (Total 11)	Reactive Psychosis (Total 10)	Psychosis Nos. (Total 6)	Organic Psychosis (Total 4)	Neurosis (Total 13)
Schizophrenia	62 (72.9%)	6 (19.4%)	5 (45.5%)	5 (50%)	2	2	5 (38.4%)
Mania/ Hypomania	18 (21.1%)	24 (77.4%)	—	—	— 2	—	1
MDP (Depression)	1	—	5 (45.5%)	2	—	—	—
Reactive Psychosis	—	—	—	3	2	—	1
Psychosis NOS	—	1	—	—	—	1	1
Organic Psychosis	1	—	—	—	—	1 (25%)	1
Neurosis	3	—	1	—	—	—	4 (30.7%)

the relative frequency of particular diagnostic changes. Seventy six percent of the diagnostic changes varied from one category to the other and remained so. Ten percent reverted back to the original diagnosis following one or more major revisions. The remaining 14% never regained original diagnosis. Table 5 shows the diagnostic discrepancies between the original and the final diagnoses. Seventy three percent of originally diagnosed Schizophrenics, 77.4% of Manics (bipolar), 45.5% of Depressives (Unipolar) and only 31% of Neurotics were stable. In addition we also looked into various diagnostic changes ever occuring. Significantly more schizophrenics became Manics rather than the reverse (Table 6). In other broad categories including Non-Paranoid schizophrenics Vs. Paranoid Schizophrenics no significant trend was observed.

TABLE 6. *Frequency of Diagnostic changes (ever) Mc Nemer's Test*

	Changes	Statistic
A.	Mania-Schiz-6/31 Schiz-Mania-20/85	$x^2=7.53$, d.f.$=1$ $p<0.01$
B.	M.D.P(D)-Schiz-1/61 Schiz-MDP(D)-4/85	$x^2=0.4$, d.f.$=1$, N.S.
C.	Paranoid Schiz-Nonparanoid Schiz-7/9 Non paranoid Schiz. Paranoid Schiz. 5/76	$x^2=0.08$, d.f.$=1$, N.S.
D.	Psychosis (Functional-Neurosis 5/143 Neurosis-Psychosis (Functional) 8/13	$x^2=0.3$, d.f.$=1$, N.S.
E.	Organic Psychosis-Functional Psychosis 3/4 Functional Psychosis-Organic Psychosis 1/143, N. S.	$x^2=0.25$, d.f.$=1$

DISCUSSION

In our sample 75% of the persons were stable over successive admissions. The overall stability of the Psychiatric diagnosis was reported to be 54% by Cooper (1967) and 58% by Kendell (1974). In our study diagnostic stability in most categories except schizophrenia and Mania were below 50%. It is important to remember that in some of the categories sample size is very small and caution is needed in drawing any firm conclusion. Diagnostic stability of Mania and Schizophrenia was 77.4% and 73% respectively, which is similar to Kendell's findings. We left out Alcoholism and Personality disorder as the patients with these diagnoses may well develop another illness and receive a second diagnosis which need not be a significant change. Kazanetz (1979) reported a very low reliability of the diagnosis 'Schizophrenia' with longer follow up (10 years). However, Mellor *et al.* (1981) reported that 88% of Schizophrenics with Schneider's first ranks symptoms were stable at the end of 8 years. Very high stability of the Schizophrenia and Affective disorder were obtained when formalised interview schedule and specified diagnostic criteria was used. After a preliminary survey Winokur (1974) reported that 98% of the Schizophrenics, 76% of M. D. P. (bipolar) and 88% of the depressives were stable. Tsuang *et al.* (1981) followed up the patients through a personal interview in the field after a period of 30-40 years and found that 92.5% of the Schizophrenics, 56% of the bipolar patients and 63% of the Depressives (Unipolar) were stable. In their sample 1% of the Schizophrenics became organic psychotics and about 8% of Bipolar patients became Schizophrenics. In Kendell's study also Schizophrenia was more stable than Mania. Surprisingly, in our set up Mania was a more stable diagnosis than Schizophrenia. It could possibly be due to the fact that according to our criteria change from bipolar illness to unipolar illness or vice versa was not considered significant. The two previously mentioned studies also had similar criteria. In another study, over a 7 year period, only 18 patients with a diagnosis of Schizophrenia changed to MDP (Ibe & Barton, 1980). According to Garrey and Tuason (1980) irritable affect and high rate of psychotic symptoms during the previous admission caused a misdiagnosis of Schizophrenia. Later these patients were rediagnosed as manics. We did not notice any significant change from Non Paranoid Schizophrenia to Paranoid Schizophrenia or vice versa. Earlier Tsuang *et al.* (1981) and Dupue and Woodburn (1975) had reported that a changeover from Paranoid Schiz to Non paranoid Schiz is quite common. They even proposed that possibly the diagnostic subtypes are inter changeable within Schizophrenia and this may be due to the chronic course of the disease itself. We had no patient of Paranoid states turning to Schizophrenia, although it has been reported that 3-22% of paranoid illness did attain the label of a Schizophrenia (Kendler, 1980). For an analysis of change in diagnosis a diagnosis ever given to a patient should also be considered which is reflected in Table 6.

We must emphasize that the diagnoses in this study was given by different clinicians from climical interviewes using I. C. D. Criteria. It is currently believed that the broad diagnostic categories in Psychiatry are mutually exclusive and no transitional or intermediate form on a continuous spectrum is acceptable. Hence reasons for diagnostic discrepancies lie outside the patients themselves. Diagnostic stability depends on source of information, amount of in-

formation collected and diagnostic criteria used. It is well known that I. C. D. criteria is very flexible and reliability as often poor. This possibly explains the low stability of the different diagnostic categories in our study. The implications are obvious. We, in our setup should use rigorous diagnostic assessment not only for research but also for clinical purposes.

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