ACUTE SCHIZOPHRENIC EPISODES—ARE THEY SCHIZOPHRENIC?

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The diagnosis and nosology of Psychotic disorders have been matters of interest and debate since Kraeplin's original delineation of Manic depressive illness and schizophrenia. Although in the past, it was largely of academic interest, the accurate classification of these disorders has assumed greater importance with the availability of newer and more specific treatments for the psychoses. About fifty years after its introduction by Bleuler (1924), acute schizophrenia remains a diagnostic label without a disease. Bleuler's term arose from his observation that individuals with an acute onset of typical schizophrenic symptoms did not necessarily have a deterioratory course, as had been suggested by Kraeplin, and that nearly 25 per cent remitted.

I.C.D.-8 and I.C.D.-9 have defined acute schizophrenic episodes as a type of schizophrenia but DSM III rules out the very existence of acute schizophrenia by the requirement of a minimum duration of symptoms of six months. Tayler et al. (1974) examined twenty-six consecutive patients who had a diagnosis of acute schizophrenia and found that only one patient satisfied research criteria of schizophrenia and half of the sample satisfied research criteria for mania. Tsuang et al. (1976), Fowler (1978) and Coryell and Tsuang (1979) also suggest that so-called atypical or good prognosis schizophrenics have close similarity to affective disorders. Hirschowitz et al. (1980) tried Lithium in good prognosis schizophrenia and found that one third of patients showed reduction of their schizophrenia like symptoms during the Lithium trial.

Many authors have described patients with schizoaffective schizophroria (1933), Langfeldt's schizophroriaform Psychoses (1939), Me­duna's oneirophrenia (1950), Fowler et al.'s 'Good Prognosis' schizophrenia (1972), Vaillant's remitting schizophrenia (1963) have all been introduced in partly successful attempts to define those patients with acute onset and whose illnesses resolved. Recently Robin and Guze (1970) and Pope and Lipinsky (1978) reviewed the literature on the clinical picture and outcome of acute schizophrenia and concluded that schizophrenia with good prognosis is not a mild form of schizophrenia, but a different illness, probably related to affective disorders.

Considering these conflicting views regarding the nosology of acute schizophrenia, it was decided to carry out a detailed study of patients with acute schizophrenic episodes and compare them with true cases of MDI and schizophrenia on several variables including phenomenology, family history and long term follow up to find out the nature of such illnesses.

MATERIAL AND METHODS

Subjects of the present study were fifty consecutive patients with diagnosis of acute schizophrenic episode as per ICD-8 criteria admitted in Psychiatry ward of Rajendra Hospital, Patiala, during 1975-76. In addition, a control group of 100 cases of Manic Depressive Psychoses and 100 cases of schizophrenia diagnosed according to criteria of Feighner et al. (1972) were also taken up for the study.
A detailed history and mental state examination was carried out on each patient on a standardised proforma. First degree relatives of all probands were interviewed in detail for any history of psychotic illness and information regarding those relatives who could not be contacted personally was elicited from other relatives of probands. All cases were followed up for a minimum of 4-5 years.

OBSERVATIONS

Table 1 shows the age and sex distribution of all cases. 84 per cent of subjects of ASE group were below the age of thirty and were thus significantly different from the M.D.I. group (p<0.01) and from the schizophrenic group (p<0.02). Further, a majority of the ASE patients (96 per cent) had their first onset of illness before the age of thirty (Table 2). There was no significant sex difference among the different patient groups. Precipitation factors were almost equally common in all groups (Table 3).

Table 4 shows the premorbid personality of all cases. Majority of ASE and schizophrenic group had schizoid premorbid personality, whereas a majority of MDI subjects had cyclothymic premorbid personality.

Table 5 shows the number of probands in each of the three groups who had a positive history of either MDI or schizophrenic in their first degree relatives. There was no family history of mental illness in

**Table 1—Age and Sex Distribution of all cases**

| (Age in yrs) | MDI (N=100) | ASE (N=50) | Schizo (N=100) |
|--------------|-------------|-----------|----------------|
| N | % | N | % | N | % |
| 10-20 | 13 | 13 | 22 | 44 | 18 | 18 |
| 21-30 | 31 | 31 | 20 | 40 | 48 | 48 |
| 31-40 | 18 | 18 | 8 | 16 | 30 | 30 |
| 41-50 | 26 | 26 | 4 | 4 |
| 51-60 | 12 | 12 | .. | .. | .. | .. |

Sex:
Male : Female 56 : 44 28 : 22 66 : 34

**Table 2—Age at first illness episode**

| Age (in yrs) | MDI (N=100) | ASE (N=50) | Schizo (N=100) |
|--------------|-------------|-----------|----------------|
| N | % | N | % | N | % |
| 10-20 | .. | .. | 30 | 30 | 26 | 52 | 40 | 40 |
| 21-30 | .. | .. | 33 | 33 | 22 | 44 | 46 | 46 |
| 31-40 | .. | .. | 20 | 20 | 2 | 4 | 12 | 12 |
| 41-50 | .. | .. | 9 | 9 | .. | .. | 2 | 2 |
| 51-60 | .. | .. | 8 | 8 | .. | .. | .. | .. |

Below 30 ASE Vs M.D.I. x²=18.87, p<.001
ASE Vs Schizo x²=3.50, N.S.

**Table 3—Precipitating Factors**

| Precipitating factors | MDI (N=100) | ASE (N=50) | Schizo (N=100) |
|-----------------------|-------------|-----------|----------------|
| Present | .. | .. | 25 | 25 | 12 | 24 |
| Absent | .. | .. | 75 | 75 | 38 | 76 |

MDI Vs ASE x²=.018, N.S.
Schizo Vs ASE x²=.07, N.S.

**Table 4—Premorbid Personality**

| Type of personality | MDI (N=100) | ASE (N=50) | Schizo (N=100) |
|---------------------|-------------|-----------|----------------|
| Schizoid | 6 | 6 | 25 | 50 | 40 | 40 |
| Cyclothymic | 36 | 36 | 4 | 8 | 12 | 12 |
| Obsessive | 14 | 14 | 2 | 4 | 6 | 6 |
| Sociopathic | .. | .. | 1 | 2 | .. | .. |
| Well adjusted | 44 | 44 | 18 | 36 | 42 | 42 |

Schizoid personality —
ASE Vs MDI x²=39.36, p<.001
ASE Vs Schizo x²=1.36, N.S.

Cyclothymic personality—
ASE Vs MDI x²=13.36, p<.001
ASE Vs Schizo x²=.56, N.S.

Table 5 shows the number of probands in each of the three groups who had a positive history of either MDI or schizophrenic in their first degree relatives. There was no family history of mental illness in
TABLE 5—Showing history of mental illness in family

| Type of illness | MDI (N = 100) | ASE (N = 50) | Schizo (N = 100) |
|-----------------|--------------|-------------|-----------------|
|                 | N  | %  | N  | %  | N  | %  |
| MDI             | 52 | 52 | 8  | 16 | 4  | 4  |
| Schizo          | 2  | 2  | 6  | 12 | 28 | 28 |
| Nil             | 46 | 46 | 36 | 72 | 68 | 68 |

History of MDI—
ASE Vs MDI $x^2=20.17, p<.001$
ASE Vs Schizo $x^2=4.90, p<.05$

History of Schizo—
ASE Vs MDI $x^2=6.60, p<.02$
ASE Vs Schizo $x^2=4.87, p<.05$

46 per cent of MDI, 72 per cent of ASE and 68 per cent of schizophrenic group. Out of fifty-four probands of MDI, who had a family history of mental illness, fifty-two had MDI and two schizophrenia. In contrast, of the thirty-two schizophrenics with positive family history, twenty-eight had schizophrenia and four MDI. Amongst the ASE group, there was an almost equal loading of MDI and schizophrenia (16 per cent and 12 per cent respectively) and in this respect ASE group of patients are significantly different from both MDI and schizophrenic group.

Response to treatment in hospital is shown in Table 6. Highest recovery rate was seen in ASE group (98 per cent). This recovery rate is significantly different from 80 per cent recovery rate of MDI group ($p<.01$) but is still remarkably different from only 8 per cent in the schizophrenic group ($p<.001$).

Table 7 shows the development of subsequent illness episodes. By the end of 4-5 years follow up period, sixty-eight out of 100 schizophrenic had either a recurrence or persistence of psychotic symptoms—of these sixty-four had a typical schizophrenic illness and four developed MDI. 32 per cent of MDI patients had a subsequent illness—all of which were manic depressive in nature. The lowest recurrence rate was in ASE group (only 12 per cent)—out of these 8 per cent had development of a schizophrenic illness and 4 per cent of MDI. This is again in marked contrast to both the schizophrenic and MDI groups ($p<.001$).

TABLE 7—Development of subsequent episodes

| Nature of illness | MDI (N = 100) | ASE (N = 50) | Schizo (N = 100) |
|-------------------|--------------|-------------|-----------------|
|                   | N  | %  | N  | %  | N  | %  |
| MDI               | 32 | 32 | 2  | 4  | 4  | 4  |
| Schizophrenia     | 0  | 0  | 4  | 8  | 64 | 64 |
| Nil               | 68 | 68 | 44 | 88 | 32 | 32 |

MDI ASE Vs MDI $x^2=17.47, p<.001$
ASE Vs Schizo $x^2=0.41, N.S.$
Schizo ASE Vs MDI $x^2=5.42, p<.02$
ASE Vs Schizo $x^2=42.18, p<.001$

Table 8 shows the individual symptoms listed under headings of mood, thinking, delusions and hallucinations and motor behaviour and sensorium; and the percentage of subjects in each category who showed presence of that particular symptom. The stars indicate those items which are significantly different from the other groups. It is seen that there are only six symptoms which are significantly more common in MDI than ASE subjects viz. mood—sad or euphoric, thinking—pessimistic or guilt, delusions of grandiosity and under activity.
TABLE 8—Presenting symptoms in percentage of patients

| Symptoms                        | MDI (N=100) | AES (N=50) | Schizo (N=100) |
|---------------------------------|-------------|------------|---------------|
| Mood                            |             |            |               |
| Sad                              | 74*         | 26         | 16            |
| Euphoric                        | 28*         | 4          |               |
| Irritable                       | 11          | 3          | 12            |
| Inappropriate                    |             | 60*        | 46*           |
| Flat                            |             | 6*         |               |
| Fearful                         |             | 8*         |               |
| Thinking                        |             |            |               |
| Pessimistic                     | 60*         | 3          | 8             |
| Guilt feeling                   | 22*         |            |               |
| Flight/pressure                 | 20          | 8          |               |
| Thought disorder                | 20*         | 24*        |               |
| Passivity                       |             | 6*         |               |
| Delusions and Hallucinations    |             |            |               |
| Ideas of Reference              |             | 10*        | 34*           |
| Persecution                     | 18          | 30         | 7*            |
| Grandiosity                     | 21*         |            |               |
| Magical                         | 4           | 6          |               |
| Auditory hallucinations         |             | 26         | 36            |
| Tactile hallucinations          |             | 4          | 4             |
| Depersonalization               | 14          |            | 4             |
| Motor Behavior and Sensormum    |             |            |               |
| Underactivity                   | 58*         | 2          | 10            |
| Hyperactivity                   | 38          | 24         | 26            |
| Gross excitement/violent        | 12          | 38         | 34            |
| Withdrawn/preoccupied           |             | 10         | 36*           |
| Inappropriate/bizarre           | 2           | 18         | 44*           |
| Catatonic                       |             | 14         | 30            |
| Distractibility                 | 10          | 2          |               |
| Perplexity/confusion            |             | 20         |               |
| Increased religiosity           | 2           | 22*        | 30*           |
| Muttering and gesturing         |             | 38*        | 52*           |
| Regressed behaviour             |             | 20*        | 32*           |

Following seven symptoms are significantly more often seen in the ASE as compared to MDI subjects viz. inappropriate mood, thought disorder, ideas of reference, tactile hallucinations, increased religiosity, muttering and gesturing and regressed behaviour. All these symptoms are also present in schizophrenic group who in addition showed flatness of affect and feelings of passivity which were not seen in any of the other two groups. None of the other symptoms were discriminatory.

Table 9 shows the family studies of good prognosis schizophrenias/schizophreniform psychoses as compared with manic depressive psychoses and process or unrecovered schizophrenias in terms of the percentage of index cases with positive MDI or schizophrenic illness in their relatives. Our findings show a low incidence of both MDI and schizophrenia in the relatives of those with a diagnosis of acute schizophrenic episode compared to the typical MDI and schizophrenic probands. These findings are similar to those of Mitsuda (1957) for the group of atypical psychoses.

**DISCUSSION**

The findings of the present study suggest that patients diagnosed as suffering from ASE were comparatively of younger age
group—the majority having the first onset of illness before the age of thirty. Stressful factors were evident in about 24 per cent cases. About half of them had schizoid premorbid personality and about one third have well adjusted premorbid personality.

In clinical presentation, the ASE group can be distinguished both from process schizophrenia on one hand by the absence of symptoms like feeling of passivity and flatness of effect and from true cases of MDI on the other by the absence of sad and euphoric mood, pessimistic, guilt feelings etc. However they do show inappropriate mood, delusions, hallucinations, muttering and gesturing and marked regressive behaviour.

When we compare the family history of these three groups, it is seen that in ASE group, the risk for MDI and schizophrenia is low and almost evenly distributed in first degree relatives. Family history of MDI and schizophrenia in ASE group is significantly different from that of both MDI and schizophrenia group. Thus they seem to fall in between pure cases of MDI and schizophrenia.

Most of the previous studies of Vaillant (1963), Stephens et al. (1963), Fowler (1972, 1978), Tsuang (1976) have suggested a higher genetic loading of MDI in the first degree relatives of their sample of good prognosis schizophrenics and which are almost comparable to the present sample of acute schizophrenics. Our study also supports the previous studies in this respect although not to the same degree.

Response to immediate treatment in hospital has been found to be excellent in ASE group (98 per cent recovery) and in this respect again, it is significantly different from both MDI and schizophrenic groups. Astrup et al. (1957, 1959), Welner and Stromgren (1958), Stephens et al. (1963), Fowler (1972, 1978) have all found acute onset to be associated with recovery in their studies of comparative sample of patients.

Natural course of illness in ASE group is again significantly different from both MDI group and schizophrenic group. Majority of the patients did not tend to have schizophrenia like illness compared to 64 per cent in the schizophrenics and only 2 per cent cases tend to have an episode of MDI compared to that of 32 per cent in cases of MDI group.

CONCLUSIONS

Our findings thus do not support the officially held view of ICD-8 and ICD-9 that ASE is a subtype of schizophrenia. It is not only different from the schizophrenia but also from pure cases of MDI in many respects. It is suggested that they are probably suffering from a third psychosis which on grounds of clinical features, response to treatment, family history and course of illness tend to fall in between the cases of true schizophrenias and manic depressive illness.

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