A FOLLOW UP STUDY OF SCHIZOAFFECTIVE PSYCHOSIS: AN APPRAISAL OF SOCIO-CLINICAL AND DIAGNOSTIC ASPECTS

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SUMMARY

Sociodemographic, clinical and outcome characteristics of 29 cases who had the diagnosis of schizoaffective psychosis were studied. On the basis of longitudinal course of the illness, 2 distinct subgroups of patients could be delineated. Patients with episodic illness were more akin to affective disorders while those with continuous course of illness were conceptually closer to schizophrenia. Concordance of the ICD-9 diagnosis of these patients with other well known diagnostic systems like Research Diagnostic Criteria, DSM-III-R and proposed ICD-10 was studied. Advantages and limitations of these diagnostic systems with regard to the diagnosis of schizoaffective psychosis are discussed.

The distinction between schizophrenia and affective psychoses is central to the understanding and classification of non-organic psychotic disorders. The exclusiveness of Kraepelin's two-entity principle has been under constant challenge ever since it was proposed (Levitt and Tsuang, 1988).

Kety (1980) noted in a review of schizophrenia research that schizophrenia and manic depressive illness did not suffice to describe all non-organic psychotic patients, particularly those evincing both schizophrenic and affective symptoms.

Although there is nearly unanimity of opinion about the existence of schizoaffective psychosis (SAP), over the period of time, different workers have viewed schizoaffective psychosis differently. Some have proposed it to be a separate category that occupies a position between schizophrenia and affective disorders (Stephens, 1972; Procci, 1976); others regard it as part of a continuum that includes both disorders (Redlich and Freedman, 1966); still others consider it a variant of schizophrenia (Lehman, 1975); yet others view it as a variant of affective disorders (Pope et al., 1980; Rosenthal et al., 1980).

Even the standard diagnostic and classificatory systems have viewed SAP differently. In ICD-9 (WHO, 1978), this diagnosis is essentially a part of schizophrenic psychosis. Research Diagnostic Criteria (RDC) of Spitzer et al. (1978) puts it separately but describe mainly “schizophrenic” and mainly “affective” subtypes. DSM-III-R (American Psychiatric Association-APA, 1987) describes it under a separate category of “Disorders not classified elsewhere” as in the 1986 draft of ICD-10 (WHO, 1987), SAP was classified as a sub-category of Affective (Mood) disorders. Subsequently, this position was changed, and the May 1990 draft of ICD-10 (WHO, 1990) now puts it under the major category of “Schizophrenia, Schizotypal and Delusional disorders”.

ICD-10 (draft) requires prominent

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1. Senior Resident
2. Assistant Professor
3. Additional Professor
4. Junior Resident

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presence of both schizophrenic and affective symptoms within the same episode, preferably simultaneously, but at least within a few days of each other. The concurrent presence of schizophrenic and affective symptoms in SAP is also required in ICD-9, RDC and DSM III-R.

However, different positions have been taken with respect to the presence or otherwise of full schizophrenic and full affective syndromes as well as the period of presence or absence of schizophrenic and affective symptoms during the same episode.

In the ICD-10 (draft), occurrence of an occasional schizoaffective episode in an otherwise recurrent depressive or manic illness does not invalidate a diagnosis of bipolar affective disorder or recurrent depressive disorder. Thus, the proposed ICD-10 gives importance to the longitudinal course of the illness.

Several workers have proposed that a valid diagnostic category should be based on more than patients presenting symptomatology alone (Procci, 1976; Weiner et al., 1977). Under ideal circumstances, the establishment of a diagnostic entity should include a characteristic syndrome including short and long-term outcome, aetiology, response to treatment, and family-history/genetic patterns (Grossman et al., 1981). A complete clinical appraisal may be a desirable method to obtain this objective.

Therefore, the present study was undertaken, with a view to develop a better understanding into the contribution of different clinical, treatment and outcome variable towards the concept of schizoaffective psychosis.

**Aims**

1. To study the socio-demographic characteristics, symptomatology, course of the illness, and response to treatment in patients of schizoaffective psychosis.
2. Outcome of these patients in clinical, occupational, and social areas up to one year after treatment.
3. Concordance of the diagnosis made according to ICD-9, with criteria and guidelines of some other diagnostic systems, viz. DSM III-R, RDC, and ICD-10 (May 1990 draft).

**Material and Methods**

This study was conducted at the Department of Psychiatry, Nehru Hospital, Post Graduate Institute of Medical Education and Research, Chandigarh. The ninth revision of ICD (WHO, 1978) is conventionally employed in this department, for classifying the patients' illness.

The study sample consisted of 29 patients, who were diagnosed as having schizoaffective psychosis, between January 1985 and December 1988. Their socio-clinical characteristics were noted, and their outcome in clinical, occupational, and social areas, up to one year after treatment was studied. This was judged by symptoms/signs at follow-ups; return to work and degree of impairment therein, as judged from patients' and relatives' reports; and their social adjustment at home, work-place, and social circle.

The initial diagnosis made according to ICD-9 criteria, was then validated with the diagnostic guidelines of three other diagnostic systems viz ICD-10 (May 1990 draft), DSM III-R, and RDC. Concordance of diagnosis between the different diagnostic systems was measured by Cohen's Kappa Coefficient method (Cohen, 1968).

**Results**:

(A) **Socio-demographic characteristics**:

The cases were evenly distributed
between males (n=15) and females (n=14). Most of the cases (n=27) were between 15 and 39 years of age, at the first contact. 15 patients were from urban background, and 16 patients had been living in joint/extended families. 16 patients had education below the high school grade.

(B) Clinical characteristics:

17 patients (58.6%) had an acute onset of illness, while 12 patients (41.4%) had insidious onset. Significant psychosocial stressor preceding onset of illness, was present in only 7 patients (24.1%). Premorbidly, 12 patients (41.4%) were well-adjusted, while 15 patients (51.8%) had schizoid traits. Of the other two patients, one had obsessive, and the other had passive-aggressive traits. Family history of psychiatric illness in first-degree relatives was present in 14 patients (8.2%); of these, 11 had a family history of schizophrenia, 1 had affective disorder, and two had schizoaffective illness in their families.

On examining the longitudinal course of the patients' psychiatric illness, two distinct patterns emerged:

(1) Continuous course with schizophrenic and affective features since onset (n=12).

(2) Episodic course-current illness schizoaffective, with different illness in previous episodes or schizoaffective illness in current as well as previous episodes (n=17).

The mean duration of illness, since the first diagnosis of schizoaffective psychosis at this treatment centre, was 47.92 (SD 21.88) months in patients with continuous course; while that of patients with an episodic course was 42.59 (SD 9.19) months.

(C) Characteristics of patients with continuous vs episodic course:

The socio-demographic characteristics of the two groups are shown in Table 1. No statistically significant differences were observed between the two groups.

### Table 1—Socio-demographic characteristics

|                      | Continuous (n=12) | Episodic (n=17) |
|----------------------|------------------|-----------------|
| **Age (in years)**   |                  |                 |
| Mean                 | 27.16            | 26.51           |
| SD                   | 7.90             | 12.45           |
| t                    | 0.08, N.S.       |                 |
| **Sex**              |                  |                 |
| Male                 | 9                | 9               |
| Female               | 6                | 8               |
| X²                   | 0.02, d.f. = 1, N.S. |
| **Education**        |                  |                 |
| Below High School    | 7                | 9               |
| High School and above | 5              | 8               |
| X²                   | 0.06, d.f. = 1, N.S. |
| **Marital Status**   |                  |                 |
| Single               | 3                | 9               |
| Married              | 4                | 3               |
| X²                   | 0.12, d.f. = 1, N.S. |

Table 2 shows the differences between the clinical characteristics of the two groups, but which were not statistically significant. However, there was an increased frequency on acute onset in cases with an episodic illness; relatively higher number of patients with schizoid traits premorbidly in continuous illness group; and 2 patients with episodic illness had family history of schizoaffective psychosis, and one had family history of affective disorder.

It was found that the subtype of schizo-mania was more commonly encountered in the group with episodic course of illness.
The predominant signs and symptoms seen in these patients are shown in Table 3. Only those signs and symptoms have been listed which could be elicited in at least 50% of the subjects in each group.

Whereas patients with a continuous illness showed odd behaviour, illogical thinking and negative symptoms predominantly; those with an episodic illness had florid psychopathology with delusions, hallucinations, and impaired insight.

(D) **Treatment & Outcome:**

8 patients (27.6%) received only antipsychotics, while 15 patients (57.7%) were treated with a combination of antipsychotics and antidepressants. 2 patients received a course of ECT in addition. 3 patients who had an episodic course, were treated with lithium carbonate in addition to antipsychotics with/without antidepressants. One patient who did not respond to combination of Lithium + antipsychotics, did so when carbamazepine was added to his treatment regimen.

Early recovery was seen in patients with episodic course; two patients improved completely within 4 weeks of treatment. By the end of 6 months, 9 patients had become clinically asymptomatic; 7 of them had episodic course of illness.

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**Table 2—Clinical characteristics**

|                          | Continuous illness | Episodic illness |
|--------------------------|--------------------|-----------------|
| **Onset:**               |                    |                 |
| Acute                    | 5                  | 12              |
| Insidious                | 7                  | 5               |
| **X² = 2.43, d.f. = 1, N.S.** |                |                 |
| **Duration (in months):**|                    |                 |
| Mean                     | 47.92              | 42.59           |
| SD                       | 21.68              | 9.19            |
| **t = 0.90, N.S.**       |                    |                 |
| **Type of affective symptoms:** |                |                 |
| Depressed                | 9                  | 7               |
| Manic                    | 3                  | 10              |
| **X² = 2.03, d.f. = 1, N.S.** |                |                 |
| **Pren Jord personality:** |                    |                 |
| Well adjusted            | 4                  | 8               |
| Schizoid                 | 8                  | 7               |
| Others                   | 0                  | 2               |
| **X² = 0.13, d.f. = 1, N.S.** |                |                 |
| **Family HJO psychiatric illness:** |                |                 |
| Schizophrenia            | 5                  | 6               |
| Affective disorder       | 0                  | 1               |
| Schizoaffective psychosis | 0                 | 2               |
| **Fisher's prob. test, p = 0.23** |                |                 |

**Table 3—Predominant signs and symptoms**

| Continuous illness (n = 12) | Episodic illness (n = 17) |
|-----------------------------|--------------------------|
| * Decreased sleep           | * Decreased sleep        |
| * Increased motor activity  | * Increased psychomotor activity |
| * Irritability              | * Suspiciousness          |
| * Apathy for personal care and hygiene | * Delusions of persecution |
| * Odd behaviour             | * Delusions of reference  |
| * Illogical thinking        | * Auditory hallucinations |
| * Self-punitive ideas       | * Impaired Insight        |
At the end of one year, out of 23 patients who were available for follow-up, 14 had complete clinical recovery. 12 patients had returned to premorbid level of occupational functioning, while social functioning came to normal in 9 patients only. The differences were not statistically significant between the two groups of patients in their outcome at one year (Table 4).

**Table 4—Outcome at one year after treatment**

| Area of Improvement | Continuous Illness (n=11) | Episodic Illness (n=12) |
|---------------------|--------------------------|------------------------|
| Clinical            |                          |                        |
| Complete            | 5                        | 9                      |
| Partial             | 6                        | 3                      |
| \( \chi^2 = 1.05, \text{d.f.} = 1, \text{N.S.} \) |
| Occupational        |                          |                        |
| Complete            | 4                        | 6                      |
| Partial             | 7                        | 4                      |
| \( \chi^2 = 1.07, \text{d.f.} = 1, \text{N.S.} \) |
| Social              |                          |                        |
| Complete            | 4                        | 5                      |
| Partial             | 7                        | 7                      |
| \( \chi^2 = 0.03, \text{d.f.} = 1, \text{N.S.} \) |

(E) **Diagnostic aspects**

As shown in Table 5, 21 patients fulfilled the diagnostic criteria and guidelines of all the four diagnostic systems. 2 patients did not satisfy the criteria of ICD-10 (May 1990 draft) because of lack of florid, positive symptomatology of schizophrenia. Both these patients had formal thought disorder and blunted/inappropriate affect, which suffice for the diagnosis of SAP in the other three diagnostic systems. Six patients diagnosed as having SAP according to ICD-9, did not fulfil the criteria of the other diagnostic systems. These patients had, besides affective symptoms, a varied combination of inappropriate/incongruous or shallow affect; volitional disturbances including negativism, and catatonia (in one patient), vague, elliptical thinking but without any thought disorder or other positive symptoms that would satisfy the criteria of other three diagnostic systems.

The four diagnostic systems showed good agreement with each other (Table 6). The concordance was highest between RDC and DSM III-R, and lowest between ICD-9 and ICD-10 (May 1990 draft).

**Table 5—Distribution of cases according to fulfilment of criteria of different diagnostic systems**

| ICD-9 | ICD-10(1990 draft) | DSM III-R | RDC | Number |
|-------|-------------------|-----------|-----|--------|
| +     | +                 | +         | +   | 21     |
| +     | -                 | +         | +   | 2      |
| +     | -                 | -         | -   | 6      |

**Table 6—Concordance (K values) across diagnostic systems**

|        | ICD-9 | ICD-10(draft) | DSM III-R | RDC |
|--------|-------|---------------|-----------|-----|
| ICD-9  | -     | 0.71          | 0.87      | 0.87|
| ICD-10(draft) | -     | -             | 0.81      | 0.81|
| DSM III-R | -     | -             | -         | 1.00|
| RDC    | -     | -             | -         | -   |
Discussion:

In the present study two subgroups of patients of schizoaffective psychosis could be delineated on the basis of their longitudinal course of illness. Patients with episodic course more often had an acute onset, florid psychopathology, with early response to treatment. Addition of lithium/carbamazepine was also effective in some of these patients who responded less favourably to initial treatment with antipsychotics with/without antidepressants. Patients who had a family history of affective disorder and schizoaffective psychosis, belonged to this group. Their illness can be conceptualised to be more similar to affective disorder.

On the other hand, patients with continuous illness showed predominantly negative symptoms, odd behaviour, illogical thinking and tended to have occupational dysfunction. Their illness can be viewed to be more akin to schizophrenic illness.

Majority of our patients fulfilled the diagnostic criteria of the four diagnostic systems, and there was a high concordance for SAP between the different diagnostic systems. Six patients who did not satisfy the criteria of other diagnostic systems, nonetheless, had certain features that precluded a definitive diagnosis of either schizophrenia or affective disorder. ICD-9 provides a rather conceptual definition of SAP. This however, always leaves a scope for under or over inclusion of cases within this framework. ICD-10 (May 1990 draft) by attributing importance only to positive schizophrenic symptoms, has become rather restrictive in its approach towards the diagnosis of SAP.

For SAP, RDC have cross-sectional criteria that apply to a specific episode, but also subtype along two dimensions: manic vs depressed; and mainly affective vs mainly schizophrenic-and provide additional criteria for acute, subacute, subchronic, and chronic presentations. By mixing together patients satisfying criteria of different RDC subtypes, and by not including longitudinal course, one can obtain quite a heterogeneous sample of patients through this diagnostic system.

The cross-sectional criteria of DSM-III R for schizoaffective psychosis create further confusion by insisting that mood-incongruent psychotic symptoms should be present for at least two weeks during the absence of prominent affective symptoms (i.e. psychosis during euthymia), during an episode of the illness. Moreover, schizophrenia should be ruled out, i.e. the mood syndrome should not be brief relative to the total duration of the psychosis.

Therefore, relying on a cross-sectional diagnosis of SAP will more often produce a heterogeneous group of patients. Not only there will be problem of deciding for either schizophrenic or affective psychosis, but also there may be a mixing-in of other atypical psychosis. If the continuum hypothesis of psychosis is taken to be the most accurate, there could be an infinite variety of psychoses. Some of the studies (Grossman et al., 1984) have noted that type of affective symptoms, or predominance of affective versus schizophrenic symptoms do not even influence the outcome of these patients. From the present study, it has however been found that depending on the course (episodic vs continuous) certain differences are seen not only in the symptomatology and other clinical variables, but also in the initial response to treatment, and at short-term outcome (at one year).

We would suggest that SAP should be separately catagorised, as in DSM III-R. The two probable subtypes, as the findings of the present study suggests, may be compared separately with the
major functional psychosis-affective disorder and schizophrenia, to delineate the commonalities and differences. This would further enhance our understanding of the illness, and enable us to predict its outcome so as to help us in deciding appropriate management. Our study sample being small for such deductions, we suggest comparative studies with larger sample size.

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