THE COURSE OF DEPRESSIVE ILLNESS: A FOLLOW-UP INVESTIGATION OF 92 CASES

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SUMMARY

Ninety two out of one hundred cases of major depressive disorder were followed up for a period of 5 to 10 years after the index diagnosis. 36.6 per cent of the cases, had no recurrence. Out of the 63.4 per cent of the cases who had recurrences, 37.8 per cent cases turned out to be having bipolar affective disorder and remaining 25.6 per cent had major depressive disorder, recurrent type. The change of polarity from major depressive disorder to bipolar affective illness occurred within three years after the initial depressive episode in 77 per cent of the cases. The number of depressive episodes before the onset of mania, was one in 63.0 per cent of the cases; two in 33.3 per cent and three in 3.7 per cent. 31 cases of bipolar affective disorder had a total of 152 recurrences, comprising 97 manic and 55 depressive episodes, the average being 4.9. The total number of episodes in 21 cases of major depressive disorder, recurrent type, were 73 yielding an average of 3.4, significantly less than those of bipolar affective illness cases. 2.2 per cent of the cases had successfully committed suicide.

Kraepelin's (1921) bestowal of benign quality upon the affective illnesses served to inject a feeling of optimism into the minds of psychiatrists with results that the prognosis of manic-depressive psychosis became a matter of complacency. Lundquist (1945) also supported the Kraepelian stand after seeing that 85 per cent of his 103 patients were 'socially recovered' when followed up over nearly 30 years. On the other hand, several reports fail to confirm the favourable outcome in manic-depressive psychosis. Rennie (1942) noticed that cyclothymic (bipolar) cases progressed to chronicity. His follow-up of 208 manic depressive psychotics for 20 years revealed a poor prognosis associated with more frequent attacks. Bratfos and Haug (1958) found that the circular form of manic depressive illness seemed to have least favourable prognosis. A 'reasonably satisfactory social adjustment' was possible only in 4 per cent of 42 patients studied by Hastings (1958). Of manic depressive psychosis, Norris (1959) noted that of 100 discharges, 40 are likely to be readmitted, and of these 20 will have at least two readmissions within about four years after discharge. That, bipolar patients have more episodes has been reported by Perris (1968), who followed 131 patients for 20 years. In Winokur et al.'s (1969) series of 28 bipolar patients followed up for an average of two years, there were only four who were "well in every way". A poor prognosis was also expressed by Shobe and Brion (1971), who followed up 115 private manic depressive psychotics for a period of 12 years. Post (1972) reported complete recovery in 31 per cent, a continuous course in 17 per cent and varying degrees of ill health between the attacks in the remainder, in his case materials. Summarising data from 9 studies (Baastrup et al., 1970; Coppen et al., 1971; Hullen et al., 1975; Mendlewicz et al., 1973; Prien et al., 1973; 1974; Melia, 1970; Cundall et al., 1972; Persson, 1972) from four countries (the United States, England, Ireland, and Sweden), Davis (1976) reported that 262 cases (79 per cent) had recurrences of their illness (bipolar affective illness) within two years of index diagnosis.

No other follow-up study has so far been reported from India on depressive illness, except that by Venkoba Rao (1977). One quarter of 109 of his cases needed supervision.
and guidance at the time of follow-up, 3-13 years after the index diagnosis. Only 29 per cent of the series enjoyed a lasting remission following their first attack. Rest 72 per cent had recurrences.

**AIM**

The present study aimed at studying the number of recurrences and the nature of these recurrences (manic and/or depressive episodes), change of polarity (from major depressive disorder to bipolar affective disorder) and mortality from suicide and natural causes in cases of major depressive disorder (endogenous depression) diagnosed 5 to 15 years earlier and followed up.

**MATERIAL & METHOD**

The material comprised 100 cases of major depressive disorder (endogenous depression) diagnosed during preceding 5 to 10 years. These patients had been studied earlier, on the other aspects of depressive illness and reported on (Gada, 1980; 1982).

The case records of 100 cases were collected. Those patients who were not attending for follow-up advice were contacted either by post, telephone calls or through known friends or relatives. The study was carried out during 1st April 1986 to 31st March 1987, ultimately 75 cases (81.6 per cent) were examined personally at follow-up time while information was obtained through relatives and friends for 5 cases (5.4 per cent) and through telephone calls in another 5 cases (5.4 per cent). The data on remaining 7 cases (7.6 per cent) was collected by post. The data was recorded on a special proforma prepared for the purpose. The data was subjected to statistical analysis.

**RESULTS**

Out of 100 cases, information could not be obtained on 8 cases. Thus 92 cases could be followed up. The period of follow-up ranged from a minimum of 5 years to a maximum of 10 years after the index diagnosis. Ten cases had died (suicidal and natural death) during this follow-up period. These 10 cases were excluded from the final analysis. Data on 82 cases are reported in this paper.

**I. Period of follow-up**

Table I offers details in respect of the number of cases and their respective follow-up period.

It can be seen that over 75 per cent of the cases had a follow-up of 7 to 10 years.

| Follow-up period (in yrs.) | Number of cases | %   |
|----------------------------|-----------------|-----|
| 5 to 6                     | 19              | 23.2|
| 7 to 8                     | 33              | 40.2|
| 9 to 10                    | 30              | 36.6|

**II. Recurrences**

No recurrence occurred at the time of follow-up among 30 cases (36.6 per cent) (major depressive disorder, single). They were enjoying a complete remission after the first episode diagnosed at the time of the first reporting.

Recurrences were noticed in 52 cases (63.4 per cent). Amongst these, 21 cases (25.6 per cent) experienced only depressive episodes (major depressive disorder, recurrent) and 31 cases (37.8 per cent) had episodes of both depression and mania (bipolar affective disorder).

**TABLE II. Details of episodes in bipolar Affective Disorder (N=31)**

|         | Manic episodes | Depressive episodes | Total |
|---------|----------------|--------------------|-------|
| Number of Episodes | 97              | 55                 | 152   |
| Average number of Episodes | 3.1             | 1.8                | 4.9   |
Thirty one cases of bipolar affective disorder had a total of 152 recurrences, comprising 97 manic and 55 depressive episodes. The average number of both types of episodes or recurrence was 4.9; while for manic episodes alone, the average was 3.1 and for depressive episodes, it was 1.8 ($p < 0.01$). The maximum number of episodes of combined mania and depression was 7, while minimum was 2. The maximum number of episodes of mania alone was 5, and those of depression was 4. Among 21 cases, more manic than depressive episodes occurred. An equal number of manic and depressive episodes occurred in 6 cases; in 4 cases depressive episodes outnumbered the manic ones.

Table III. Details of episodes in Major Depressive Disorder, recurrent

| Number of Cases | 21 |
|-----------------|----|
| Number of Episodes | 73 |
| Average Number of Episodes | 3.4 |

Twenty one cases had recurrences of depressive episodes only (major depressive disorder, recurrent). These episodes varied from 1 to 5. The total number of episodes of depression in these 21 cases were 73, yielding an average of 3.4 which is significantly less than average rate for recurrences in bipolar affective disorder cases ($p < 0.01$). Fifteen cases (71.5 per cent) had two episodes, 10 cases (47.6 per cent) had three episodes, 2 cases (9.5 per cent) had four and 1 case (4.7 per cent) had five episodes.

III (a). Change of polarity

Four cases had manic episodes before the index diagnosis of major depressive disorder. Excluding these 4 cases, 27 cases showed a shift towards bipolarity. In 10 of these, the shift occurred in the first year, in 5 it occurred in the second year and in 6 others during the third year after the first episode of depression. In 6 cases, the shift occurred beyond 3 years as is shown in Table IV.

### Table IV. Change of polarity

| Period following first episode of depression (in yrs.) | Number of cases | % |
|------------------------------------------------------|-----------------|---|
| 1                                                    | 10              | 37.1 |
| 2                                                    | 5               | 18.5 |
| 3                                                    | 6               | 22.2 |
| 4 to 5                                               | 3               | 11.1 |
| 6 to 10                                              | 3               | 11.1 |

III (b). Depressive episodes before the shift

Out of 27 bipolar affective disorder cases, 17 cases (63.0 per cent) passed over to mania after first episode of depression, while 9 cases (33.3 per cent) developed mania after two episodes of depression. There was 1 case (3.7 per cent) who had three episodes of depression before episode of mania set in.

IV. Mortality

Ten cases (10.9 per cent) in the series had died at the time of follow-up. Of these 10, 2 (2.2 per cent) were suicidal death and in 8 cases (8.7 per cent) death was from cerebrovascular and cardiovascular diseases.

DISCUSSION

In the present study, follow-up reported is from 5 to 10 years with more than 75 per cent of the cases having a follow-up of 7 to 10 years. The follow-up period reported by Venkoba Rao (1977) was from 3 to 13 years with 85 per cent of the cases having a follow-up of 6 to 13 years. The follow-up period reported in other studies (Rinnie, 1942; Lundquist, 1945; Perris, 1968; Winokur et al., 1969; Shobe and Brion, 1971; Prien et al., 1973) varies from 2 to 30 years.

In the present study, major depressive disorder, single, cases were 36.6 per cent. Pollock et al. (1939) have found 58 per cent cases having only one episode. Rinnie (1942) reported that 23 per cent cases had single episode in life. Davis (1976) summarising data from 9 studies from four countries has
noted that 68 cases (21 per cent) had only one episodes of depression during first two years after the index diagnosis. Venkoba Rao (1977) reported 28 per cent of cases having only one episode of depression. DSM III (1980) has also recognised this category separately as major depressive disorder, single, (296.2) whereas ICD-9 (1978) has no such different category (but proposed ICD-10 has a separate such category). One third to one fourth of the cases diagnosed as major depressive disorder have no further episodes.

In the present study, the average number of episodes in bipolar affective disorder cases was 4.9. Rinnie (1942) has reported that 37 (75.5 per cent) of his 49 cases of cyclothymia (bipolar affective disorder) had more than three episodes. Carlson et al. (1974) and Venkoba Rao (1977) found an average of 5.0 and 5.7 episodes respectively in these cases. Without prophylactic treatment, the usual course of bipolar affective disorder is recurring episodes (Wolpert, 1980). Thus average number of episodes for bipolar affective disorder cases in a decade is between 5 and 6 episodes. In the present study, an average number of episodes for mania was 3.1 and for depression was 1.8, significantly in favour of manic episodes in bipolar affective disorder. The present observation and observation by other researchers (Perris, 1968; Shobe and Brion, 1971; Venkoba Rao, 1977) indicate higher frequencies of manic episodes rather than depressive episodes among bipolar affective disorder cases.

Twenty one cases (25.6 per cent) had recurrences of episodes of depression only, the episodes ranging from 2 to 5. Rinnie (1942) found that 77 per cent of his cases had second episode, 53 per cent had third episode, 30 per cent had fourth episode and 15 per cent had fifth episode of depression. Davis (1976) has reported that 49 (71 per cent) had recurrence of episode of depression within two years in unipolar depressive illness cases. The placebo controlled long term studies have demonstrated the relapsing nature of unipolar depressive illness (Montogomery, 1982). The average number of episodes of depression in the present study was 3.4, significantly less episodes than episodes in bipolar affective disorder cases, the finding similar to that reported by Venkoba Rao (1977).

One third of the cases initially diagnosed as major depressive disorder in the present study, had subsequently manic episodes, the diagnosis hence was changed to bipolar affective disorder. In 77 per cent of these cases, the change to bipolar affective disorder occurred within three years. 63.0 per cent of these cases had manic episode after first episode of depression, whereas 33.3 per cent developed manic episode after two episodes of depression. Similar findings have been reported by Winokur and Morrison (1973) and Hullen et al. (1975).

Two cases (2.2 per cent) had successfully committed suicide in the present study. Rinnie (1942) reported that 5.3 per cent of his cases had committed suicide. In the year 1940-48, in cases treated by electro-conulsive therapy, the death rate by suicide fell to 2 per cent or less (Karagulla, 1950). Thus risk of death by suicide is around 2 per cent in cases of depression. 8.7 per cent of the cases in the present study died from cerebrovascular and cardiovascular diseases. Slater and Roth (1969) have reported that patients with affective diseases die from suicide, from cerebrovascular or cardiovascular catastrophe.

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