

## SEASONALITY AND UNIPOLAR RECURRENT MANIA : PRELIMINARY FINDINGS FROM A RETROSPECTIVE STUDY

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### ABSTRACT

*Fifty patients of recurrent mania were studied for seasonality of which 11 patients fulfilled our study criteria for Seasonal Affective Disorder (recurrent mania). The two groups of seasonal and nonseasonal recurrent mania were compared on clinical and socio-demographic variables. Results characterised recurrent seasonal mania with psychotic features and occurrence of episodes mainly in summer and winter instead of autumn and spring.*

*Key Words : Seasonal Affective Disorder, Recurrent Mania.*

In the past few years, there has been a resurgence of interest in the group of patients who have repeated episodes of mania without suffering from depression. Such patients are termed to be cases of 'Recurrent Mania'. Studies of retrospective nature have reported low rates of occurrence of such an illness. The use of varying criteria regarding minimum number of episodes of mania required to classify a patient as suffering from recurrent mania is the main drawback of these studies. Abrams and Taylor (1974) used the criterion of three episodes but did not mention a time frame. Their later report (Abrams et al, 1979) revised the criterion to two or more distinct manic episodes. Shulman and Tohen (1994) used the criteria of three episodes but with at least 10 years duration of illness.

Researchers have also been intrigued by an entity called 'Seasonal Affective Disorder' (SAD). Early on, in 1921 Kraepelin asserted that annually occurring affective disorder is found in 5% of manic-depressive patients. However, more recently, the concept on SAD was given by Rosenthal et al (1984) mainly for seasonal depression. Seasonal mood disorders are episodes of depression or mania that recur annually at a specific season of the year (Blehar and Lewy, 1990). By far, the most common and the most recog-

nised of these disorders, is winter depression (Rosenthal et al, 1984). Most seasonal mood disorders are unipolar, but episodes of mania that recur annually in an individual are not common. Also, majority of winter depressives do not experience a manic or hypomanic mood during summer.

Studies have been carried out to ascertain the seasonality of onset of manic episodes (Margoob and Dutta, 1988; Faedda et al, 1993); but literature search did not reveal any studies relating to recurrent mania with seasonal pattern. Hence the present study was conducted to evaluate this aspect of affective disorders.

### MATERIAL AND METHODS

A retrospective study was conducted by the authors in which case records of all patients (both inpatient and outpatient) seen in the Department of Psychiatry, PGIMER, Chandigarh were screened for a 5 year period (1989-93). A total number of 9900 cases were screened and of these, 775 patients (7.83%) were identified as suffering from an affective disorder (unipolar and bipolar), diagnosed after applying the ICD-10 criteria (WHO, 1992). Because of the time frame of screening of records, many of the cases had earlier been diagnosed according to

ICD-9. For these cases, the criteria of ICDD-10 were applied and only those patients who fulfilled the ICD-10 diagnostic criteria for affective disorders were included in the study.

Of these, a group of 50 patients met our criteria for Recurrent Mania (three or more reported episodes of mania without any depressive episode from the onset of the affective disorder till the time of study). This group was then subjected to Rosenthal's criteria for 'SAD' which were modified by us in the following ways :

a) Diagnosis of major affective disorder by ICD-10 rather than Research Diagnostic Criteria (Spitzer et al, 1978).

b) Manic episodes instead of depressive episodes.

Thus, the modified Rosenthal's criteria applied were :

1. Development of manic episode in temporal correlation to a particular season in at least 2 consecutive years
2. Full remissions also occur at a specific time of the year.
3. Number of seasonal episodes outnumber non-seasonal episodes by a ratio of 3:1.
4. Absence of any other psychiatric illness.

The year was divided into four seasons of equal lengths, namely Spring (February-April), Summer (May-July), Autumn (August-October), and Winter (November-January).

This led to formation of two groups of recurrent manics, namely with seasonal pattern (SRM) and without seasonal pattern (NSRM), which were then compared on various sociodemographic and clinical variables.

## RESULTS

The mean age of NSRM (n = 39) was  $32.32 \pm 10.8$  years as compared to  $28.55 \pm 9.27$  years for SRM (n = 11). Both groups had predominance of married males of Hindu urban background hailing from the plains ( $27^{\circ}39'$  to  $32^{\circ}30'$  north latitude and  $73^{\circ}51'$  to  $73^{\circ}36'$  east longitude). No significant statistical differences were found between the groups on the socio demographic variables.

The SRM group comprised of 3 patients each with winter, summer and spring onset ; one patient with autumn onset; and one patient who had an equal number of episodes in summer and winter.

TABLE - 1  
COMPARISON OF CLINICAL VARIABLES

Variable	Non Seasonal Recurrent Mania (n = 39)	Seasonal Recurrent Mania (n = 11)
Age of onset	25.13 years (9.24)	20.90 years (8.40)
Total duration of illness	91.33 months (39.04)	87.82 months (90.23)
Family history of psychiatric illness	12/39	6/11
Presence of psychotic features	15/39	10/11*
Severity of illness (Severe dysfunction/ admission)	36/39	10/11

\*P < 0.05

Figures in parenthesis denote S.D.

Comparison of clinical features in the study groups is shown in Table 1. The SRM group had significantly more patients with psychotic symptoms (delusions and hallucinations) as compared to NSRM group. On other variables such as age of onset, duration of illness, severity of illness (diagnosed according to ICD - 10), family history, etc., no significant differences were observed between the two groups.

Table II shows that the mean duration of manic episodes was comparable in the two groups. However, the mean number of episodes experienced was higher for SRM as compared to NSRM. Also, there was difference between the two groups regarding the number of episodes with onset in various seasons. For onset in autumn season, such differences in the number of episodes were statistically significant.

TABLE - II  
ILLNESS EPISODES CHARACTERISTICS

Variable	Non Seasonal Recurrent Mania (n = 39)	Seasonal Recurrent Mania (n = 11)
Total number of episodes	161	97
Mean duration of episodes	2.90 months (1.54)	3.27 months (0.53)
Mean no. of episodes	4	9
Episodes for which seasonality known	88 (54%)	97 (100%)
Onset in summer	29 (32.95%)	44 (45.36%)
Onset in winter	25 (28.41%)	32 (32.99%)
Onset in spring	16 (18.18%)	17 (17.53%)
Onset in autumn	18 (20.46%)	4 (4.12%)*

\*  $p < 0.05$

Figures in parenthesis denote S.D.

## DISCUSSION

The percentage of unipolar recurrent manics in our total sample was 6.45% (50 of the total of 775 cases of affective disorder screened). Currently, recurrent mania is subsumed under the category of 'Bipolar Affective Disorders - Others (F. 31.8)' in ICD - 10. Hence, from the above finding, considerable weightage can be given to the concept of recurrent unipolar mania which has still not acquired a distinct nosological status and it should lead to a resurgence of interest in this area of affective disorders.

As can be seen from the results, the SRM group showed a tendency to have a greater number of and relatively longer episodes in summer and winter as compared to NSRM group which had near equal distribution of episodes in each season of the year. Efforts have been made to study seasonality in relation to mania in various ways (Myers & Davies, 1978; Margoob et al, 1988; Faedda et al, 1993). However, there is no available literature on recurrent mania with seasonal pattern. Our study is perhaps unique in that it addresses itself to the seasonality in cases of recurrent mania. Faedda et al (1993) pointed out

that bipolar disorder with seasonal recurrence has usually been studied with focus on depressive phases and very little attention has been paid to seasonal recurrences in mania or hypomania. In their study on bipolar SAD they reported two patterns in equal frequency : Fall - winter depression with or without spring - summer mania or hypomania ; and spring - summer depression with or without fall - winter mania or hypomania. Other researchers (Myers and Davies, 1978; Margoob and Dutta, 1988) focussed on season of onset in relation to mania and reported peak of manic episodes during spring or summer. It is difficult to compare the results of our study with the above cited studies. However, findings from these studies especially Faedda et al, (1993) and our study suggest that seasonal mania may be a more common clinical entity than previously realised and thus needs further research. Although clinical picture of the SRM group did not appear to be distinct from the NSRM group, it was interesting to note that SRM demonstrated nearly universal presence of psychotic features, thereby implying that such patients may require more vigorous treatment methods for resolution.

This study is not without limitations being retrospective in nature, on a small sample size in which minor depressive episodes may have been missed, and without usage of structured proforma e.g. Seasonal Pattern Assessment Questionnaire (SPAQ) (Rosenthal et al, 1984). Nonetheless, the findings are of interest and need to be refuted or confirmed by further studies.

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