

## LIFE EVENTS IN OBSESSIVE COMPULSIVE NEUROSIS

P. KULHARA<sup>1</sup>

G. PRASAD RAO<sup>2</sup>

### SUMMARY

Twenty four patients diagnosed to be suffering from Obsessive Compulsive Neurosis for the first time and individually matched controls were rated on a Life Events Scale. Leyton Obsessional Inventory was also administered to the patients and controls. It was seen that patients had significantly higher scores on life events for a time span of one year prior to the onset of illness as compared to controls. The patient group also scored highly on obsessional trait scores. The study points to a strong association between excess of life events and the onset of obsessional illness.

Over the past two decades many research workers have attempted to demonstrate that stressful life events produce psychological disturbances. The relationship of life events to schizophrenia (Brown & Birley, 1968; Birley & Brown, 1970) and depression (Paykel *et al* 1969, Finlay-Jones & Brown 1981, Cooke 1981) have been documented. The development of various reliable life events schedules and their application to life events research in relation to psychiatric disorders has increased the credibility of the results (Holmes & Rahe 1967, Brown *et al* 1973, Paykel 1974, Singh *et al* 1984).

It has been observed by many workers that the onset of obsessional illness is associated with occurrence of precipitating factors (Rudin 1953, Pollitt 1957, Lo 1967, Akhtar 1973, Prasad Rao & Kulhara 1984). However, because of absence of well defined operational criteria of precipitating factor, lack of reliability of assessment of these factors and inadequate control matching, it is difficult to evaluate the significance of these in the aetiology of obsessional disorders. A careful search of literature reveals that the interplay between life events as measured by a standardized life events inventory and the onset of obsessional illness has not been fully explored. It is only

recently that McKeon *et al* (1984) reported about the relationship between life events and obsessive compulsive neurosis.

Paucity of published work regarding the relationship of life events with obsessive compulsive neurosis prompted us to undertake the present investigation. The study is aimed at exploring the relationship between occurrence of life events and onset of obsessive compulsive neurosis.

### Material and Methods

#### Patients

The patient sample consisted of 24 consecutive patients diagnosed to be suffering from Obsessive Compulsive Neurosis on the basis of ICD-9 criteria (WHO, 1978). These patients also fulfilled Research Diagnostic Criteria for Obsessive Compulsive Neurosis of Spitzer *et al* (1978). All these patients were first contacts, newly diagnosed and had not been seen in psychiatric clinic before.

#### Controls

Twenty four normal, healthy controls individually matched for age, sex, education and socio-economic status were selected from non-blood relatives of patients attending the psychiatric out-patient clinic

<sup>1</sup> Associate Professor  
<sup>2</sup> Junior Resident

Department of Psychiatry, Postgraduate Institute of Medical Education and Research, Chandigarh - 160 012, India.

and the employees of the Institute. Subjects who had a past history of psychiatric illness or history suggestive of a psychiatric disorder in the 12 months prior to the interview were excluded.

### *Life Events*

Presumptive Stressful Life Events Scale developed by Singh *et al* (1984) which covers 51 defined life events was administered independently to the patient and a significant relative in a semi-structured interview. To determine the exact time and nature of the life event, further detailed questioning was done. The enquiry covered a period of 12 months prior to the onset of symptoms in the patient group and a similar time span prior to the interview in the control group.

### *Leyton Obsessional Inventory*

Leyton Obsessional Inventory (Cooper 1978) was translated in Hindi since it is the major local language. The translated version in a questionnaire form was given to the patients at initial contact and controls at the time of the interview. This inventory provides measurement of obsessional traits and symptoms. Usefulness of the inventory in a questionnaire form has been commented upon by Rapaport *et al* (1980).

For Hindi translation of Leyton Obsessional Inventory, translation-back translation procedure with test-retest reliability to assess the adequacy of translation was employed. For this a group of 15 Junior Residents were given the Hindi version first, and after 15 days English version was given.

### *Analysis of the data*

For test-retest reliability of translation Product Moment Co-efficient of Correlation was calculated. Students 't' test and  $\chi^2$  Test were employed to assess significance of difference.

## **Results**

The test-retest reliability of the trans-

lation was 0.79 which is satisfactory. In the patient group 91.6% of relatives and patients agreed about the date of onset of the disorder. 78% of the patients and relatives also agreed about the occurrence and nature of the life events. In the remainder, in 12% the events were only reported by the patients and in 10% only the relative reported about the event.

Socio-demographic characteristics of the patient and control samples are shown in Table 1. The two groups are essentially similar in various characteristics. The mean duration of illness in the patient groups was 21.6 months (range 3 months to 20 months).

Table 1  
Sample Characteristics

	Obsessives	Controls
<b>Age:</b>		
Mean	36.25*	35.65*
S. D.	5.85	4.95
<b>Sex:</b>		
Males	14	14
Females	10	10
<b>Marriage:</b>		
Single	16	16
Married	8	8
<b>Education:</b>		
Upto High School	4	4
Graduate	10	10
Postgraduate	10	10

\* N. S (Students 't' Test)

Table 2 shows comparison of trait and symptom scores on Leyton Obsessional Inventory, number of life events and mean weighted stress scores for patients and controls. It can be seen that patients have significantly higher symptom and trait scores as compared to normal controls ( $p < 0.001$ ). On Presumptive Stressful Life Events Scale, the patient group is scoring consis-

tently and significantly higher than the control group. The two groups, however, are not significantly different as regards the occurrence of "desirable" life events.

Table 2  
Comparison between obsessives and controls on  
Leyton scores and life events

	N=24 Obsessive		N=24 Controls		Signi- ficance
	$\bar{X}$	S. D.	$\bar{X}$	S. D.	
<b>Age</b>	36.25	5.85	35.65	4.95	N. S.
<b>Leyton Scores</b>					
a) Symptom	55.17	9.92	24.83	6.32	***
b) Trait	12.21	2.32	5.61	1.67	***
<b>Life Events</b>					
1) No. of events	4.62	1.03	1.35	0.57	***
2) Stress Score	191.83	60.30	59.00	27.94	***
3) Personal	2.62	0.63	0.72	0.70	***
Impersonal	1.14	0.46	0.72	0.76	***
4) Desirable	0.78	0.65	0.69	0.62	N.S.
Undesirable	1.70	1.01	0.60	0.72	***
Ambiguous	1.20	1.10	0.43	0.72	**

\*\*\*  $p < 0.01$

### Discussion

The choice of the life events scale employed by us warrants some elaboration. Most life events inventories, because of their foreign nature are not really suitable for use in our country as many of them fail to take cognizance of local and cultural factors. Since the inventory used by us was developed and standardized in this part of our country, it has more relevance and applicability (Singh *et al* 1984).

The results as depicted in Table 2, show that in the patient group there is an excess of life events in the 12 months prior to the onset of the symptoms as compared to normal controls. The high level of agreement in reporting of life events between the patients and the key informant lends validity to the genuineness of occurrence of excess of life events in the patient group. How-

ever, when compared to schizophrenia and depression, the rate of life events appears to be less (Brown & Birley 1968, Birley & Brown 1968, Paykel *et al* 1969).

The patient group has obtained significantly more score on both symptom and trait scores in Leyton Obsessional Inventory as compared to normal controls and this is more marked in trait score.

McKeon *et al* (1984) did not observe any significant difference in the occurrence of desirable and undesirable life events in their sample of patients and control whereas we have found such a difference. In other respects, our findings are similar to the findings of McKeon *et al* (1984).

The aetiological significance of stressful life events in the causation of psychological disorders has been commented upon by many investigators (Cooke 1983, Andrews & Tennant 1980). The large correlation in support of such an evidence merely indicates that the level of casual impact has been accurately measured. However, a large correlation can occur whether the life events have a mild or severe effect on psychological well being (Andrews & Tennant 1980). Cooke & Hole (1983) have stressed that the effect of specific types of life events on particular psychiatric disorders may even be of greater importance.

Because of the small size of the sample and varied nature of life events that are observed, it is not possible to comment on the exact aetiological role of the increased number of events in obsessional patients. Though the two groups do not show any difference in having desirable events, the occurrence of undesirable events in obsessional patients is significantly higher.

Many authors have observed a preponderance of abnormal personality types and obsessional traits in obsessional patients,

(Pollitt 1957, Lo 1967, Prasad Rao & Kulhara 1985). Even in the current study, the patients have achieved a high trait score. An analysis of the data dividing the patient and control populations into high and low trait scorers and the correlation of the number and nature of life events in them may yield aetiological important results. However, the small size of the sample precludes such an analysis. This must await conformation.

Finally, reviewing the literature, it has not been possible to locate many studies which systematically deal with the relationship between life events and obsessional disorders. This may be due to the rarity of the disorder. The results of the present investigation indicate that life events may have a significant association with the onset of obsessional illness. The aetiological role that these events play in the pathogenesis of the disorder needs to be established.

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