LIFE EVENTS IN OBSESSIVE COMPULSIVE NEUROSISS

P. KULHARA
G. PRASAD RAO

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.
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 into 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 X² Test were employed to assess significance of difference.

**Results**

The test-retest reliability of the translation 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 group was 21.6 months (range 3 months to 20 months).

Table 1

| Sample Characteristics | Obsessives | Controls |
|------------------------|-----------|----------|
| **Age:**               |           |          |
| Mean                   | 36.25*    | 35.65*   |
| S. D.                  | 5.85      | 4.95     |
| **Sex:**               |           |          |
| Males                  | 14        | 14       |
| Females                | 10        | 10       |
| **Marriage:**          |           |          |
| Single                 | 16        | 16       |
| Married                | 8         | 8        |
| **Education:**         |           |          |
| 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-
ently 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 | Significance |
|---------------------------|------------------|-----------------|--------------|
| Age                       | 36.25            | 35.65           | N.S.         |
| Leyton Scores             |                  |                 |              |
| a) Symptom                | 55.17            | 24.83           | 6.32**       |
| b) Trait                  | 12.21            | 5.61            | 1.67**       |
| Life Events               |                  |                 |              |
| 1) No. of events          | 4.62             | 1.35            | 0.57**       |
| 2) Stress Score           | 191.83           | 59.00           | 27.94**      |
| 3) Personal               | 2.62             | 0.72            | 0.70**       |
| Impersonal                | 1.14             | 0.72            | 0.76**       |
| 4) Desirable              | 0.78             | 0.69            | 0.62 N.S.    |
| Undesirable               | 1.70             | 0.60            | 0.72**       |
| Ambiguous                 | 1.20             | 0.43            | 0.72**       |

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. However, 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,
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(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 aetiologically important results. However, the small size of the sample precludes such an analysis. This must await confirmation.

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.

References

AKHATAR, S. (1973), A study of natural history of obsessional states, M. D. Thesis, Chandigarh, The Postgraduate Institute of Medical Education and Research.

ANDREWS, S. G. & TENNANT, C. (1978), Life events, stress and psychiatric illness, Psychological Medicine, 8, 545-549.

BIRLEY, J. L. T. & BROWN, G. W. (1970), Crisis and life changes preceding the onset or relapse of acute schizophrenia: Clinical aspects, British Journal of Psychiatry, 116, 327-333.

BROWN, G. W. & BIRLEY, J. L. T. (1968), Crisis and life changes and onset of schizophrenia, Journal of Social Behaviour, 9, 203-214.

BROWN, G. W., SLAIR, F., HARRIS, T. O. & BIRLEY, J. L. T. (1973), Life events and Psychiatric disorders I. Some Methodological issues, Psychological Medicine, 3, 74-81.

COOKE, D. J. (1981), Life events and syndrome of depression in general population, Social Psychiatry, 16, 181-186.

COOKE, D. J. & HOLE, D. J. (1983). The aetiological importance of stressful life events, British Journal of Psychiatry, 143, 397-400.

COOPER, J. E. (1970), The Leyton Obsessional Inventory, Psychological Medicine, 1, 48-64.

FINLAY-JONES, R. & BROWN, G. W. (1981), Types of stressful life events and the onset of anxiety and depression: Psychological Medicine, 11, 803-815.

HOLMES, T. H. & RAHE, R. H. (1967), The social Readjustment Rating Scale, Journal of Psychosomatic Research, 11, 213-221.

LO, W. H. (1967), A follow-up study of obsessional neurotics in Hong Kong Chinese, British Journal of Psychiatry, 113, 823-833.

MCKEON, J. & MANN, A. (1984), Life events and personality traits, in obsessive compulsive neurosis, British Journal of Psychiatry, 144, 185-189.

PAYKEL, E. S. (1974), Recent life events and clinical depression. In: Stress and Illness, (ed: Gunderson, E. K.). Springfield, Illions: Charles C. Thomas.

PAYKEL, E. S., MYERS, J. K., DIENELT, M. N., KLerman, G. L., LINDERTHAL. J. J. & PEPPER, M. P. (1969), Life events and depression: a controlled study. Archives of General Psychiatry, 21, 753-760.

POLLITT, J. (1957), Natural history of obsessional states, British Medical Journal, 1, 194-201.

PRASAD RAO, G. & KULHARA, P. (1985), Obsessive Compulsive Neurosis: Some socio-clinical correlates, Indian Journal of Social Psychiatry, 1, 194-201.

RAPAPORT, J., ELKINS, R. & NIKKELSEN, E. (1980), Clinical controlled trial of chlorimipramine in adolescents with obsessive compulsive disorder, Psychopharmacology Bulletin, 16, 61-63.

SINGH, G., KAUR, D. & KAUR, H. (1984), Presumptive stressful life events scale: a new stressful life events scale for use in India, Indian Journal of Psychiatry, 26, 107-114.

SPITZER, R. L., ENDICOTT, J. & ROBINS, E. (1978), Research diagnostic criteria for a group of selected functional disorders, New York: Biometric Research, New York State Psychiatric Institute.

WORLD HEALTH ORGANIZATION (1978), International Classification of Disease, 9th Revision, Geneva: WHO.