

LIFE EVENTS IN ANXIETY NEUROSIS

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SUMMARY

The study was carried out on 84 patients of anxiety neurosis and 47 controls. Presumptive Stressful Life Events Scale (PSLES) of Singh et al. (1984) was utilized for eliciting life events experienced by patients and controls during life time and 6 months prior to the onset of illness by an open ended interview. The frequency and stress scores of total life event and different categories of life events undesirable, personal, impersonal, ambiguous and desirable, experienced during lifetime and 6 months prior to the onset of the illness were significantly more in patients than in controls. When individual events were analysed a statistical difference was observed with regard to 41 out of 51 life events. Out of these 33 events were common i.e., they were observed to be significantly more in patients than in controls both during life time and 6 months prior to the onset of the illness. Four events namely, suspension from job, theft or robbery, broken engagement or love affair and conflict over dowry were found to be significantly more in patients during life time. On the other hand, 4 other life events such as, major purchase or construction of house, failure in examination, appearing for interview and getting engaged or married were found to be significantly more in patients during the 6 months prior to the onset of the illness. Thus patients were observed to experience a variety of life events more often than controls.

Life event research is one of the ways of systematically studying the relationship between stress and illness. A positive relationship has been suggested between stressful life events and subsequent psychiatric illness (Paykel 1974). A significant positive relationship between life events and illness magnitude has also been observed (Wyler et al. 1971). It has been suggested that the effect of different types of life events on different types of disorders may be of even greater importance (Cooke and Hole 1983). A review of the literature of life event in psychiatric illness shows that majority of studies have been conducted on psychosomatic and psychotic patients. There are few studies on neurotic patients. This is despite the fact that the study of life events appears to be more meaningful in neurosis wherein psychosocial factors as compared to biological factors may be of more etiological significance. Neurotic patients have been found to experience significantly more life

events, particularly serious and threatening ones, during the period of 3 months prior to illness (Cooper and Sylph 1973; Miller et al. 1976). Uhlenbuth and Paykel, (1973) in their study of neurotic patients observed that symptom intensity was directly related to the amount of recent life stress. Cooke and Hole (1983) in a subsequent study reported that 3/4 of the anxiety cases could be attributed to experience of danger events only.

Majority of studies in our country have utilized western scales with local translations and modifications (Prakash et al. 1980; Chatterjee et al 1981; Bhatti and Channabasvanna 1985). In the absence of utilization of a proper scale consisting of items more relevant and standardized for our culture, the results of these studies are questionable. Apart from this, prior studies (Venkoba Rao and Nammalvar 1976; Prakash et al. 1980; Chatterjee et al. 1981) have not taken into consideration

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certain variables such as, age, sex, socio-economic status, family and social support systems and specific vulnerability and strengths of the individual personality, which greatly modify the effect of life events on the individual.

Material and Methods

The sample consisted of 84 patients of anxiety neurosis from the psychiatric section of the out-patient department of the University Hospital, Banaras Hindu University, from September 1984 to August 1985, selected according to the following criteria :

- (1) Age between 16–40 years, having an urban domicile and coming for the first time for consultation.
- (2) Diagnosed as anxiety neurosis as per Feighner's Diagnostic Criteria (Feighner et al. 1972).
- (3) Absence of any major physical illness.
- (4) Definite onset.

Selection of Controls: Forty seven controls were selected from the relatives of patients admitted to the medical ward of the University Hospital for an acute medical illness of not more than 3 weeks duration according to the following criteria:

- (1) Absence of any major physical illness.
- (2) Absence of present or past history of psychiatric illness or any symptoms of psychiatric disturbance at the time of interview.
- (3) A neuroticism score of below 30 on the Middlesex Hospital Questionnaire (Srivastava and Bhat 1974). This was done as it has been reported that the tendency of reporting life events increases with the increase in neuroticism score. Besides, it has been reported that even normals can score high on neuroticism dimension when

one is trying to be over smart or when one feels that one is in a testing situation. Not only this some people try to give false information also (Bhatti and Channabasavanna 1985).

- (4) Group matched with patients with regard to age, sex, domicile, socio-economic and marital status.

Procedure for Data collection:

The patients and controls were evaluated on a structured proforma. Socio-economic status was assessed by the socio-economic scale for the urban population developed by Gupta and Sethi (1978).

Information regarding experience of life events by patients and controls was obtained with the help of an open ended interview using the Presumptive Stressful Life Events Scale (PSLES) devised by Singh et al. (1984) for the Indian population. Prior to using the scale in the present study reliability testing was done in a pilot study and was found to be satisfactory (0.8). The study involved 15 patients and 15 relatives in which the life events data collected from each patient was compared with the life events data about the patient given by his relative. Subjects participating in the reliability study were obtained from the psychiatric section of the out patient department of the University Hospital, and they were not included in the study sample. Reliability study was not done in the case of controls. Each event listed in the PSLES was enquired for unless it was clearly not applicable. Some probing had to be done to clarify information. In all the instances a significant member (relative or friend) was persuaded to take part in the interview as a co-informant. All events were dated as accurately as possible and cross-checked with other family members as well as against medical records. Where the date was not immediately clear an

attempt was made to relate the events to anchor dates, such as public holidays, which often proved helpful. Whenever there was still doubt about the dating of an event a range of uncertainty was plotted and its mid point chosen. The time period for which life events were recorded was life time and six months prior to the onset of illness. This period dated back from the onset of illness in the patients, and in the controls from the onset of illness in their sick relatives. Thus life events during life time in patients and controls also included life events 6 months prior to the onset of illness.

Results

1. There was no significant difference between the patients and controls with regard to age, sex, domicile, marital and socio-economic status (Table 1). The

Table 1
Sample Characteristics

Variables	Patient Group N = 84	Control Group N = 47	P
Age:			
16-20 Years	10	6	NS
21-30 Years	44	27	
31-40 Years	30	14	
Sex:			
Male	59	36	NS
Female	25	11	
Marital Status:			
Married	72	44	NS
Unmarried	12	3	
Education:			
Upto 5th	25	13	NS
6th-12th	36	23	
Grad.-Post-Grad.	23	11	
Socio-Economic Status			
IV-V	13	8	NS
VI-VII	53	29	
XIII-IX	18	10	

duration of illness of the patients ranged from 1 month to 5 years, the mean being 1.26 years.

2. The frequency and total stress scores of life events during life time and 6 months prior to the onset of illness was significantly higher in patients as compared to controls. Also, a significantly higher frequency and stress score both for life time and 6 months prior to the onset of illness was observed for the following categories of life events undesirable, ambiguous, personal, impersonal and desirable life events (Table 2 and 3).
3. Forty one life events, out of 51, were observed to be significantly more frequent in the patient group than in the control group. Four life events namely, suspension from job, theft or robbery, broken engagement or love affair and conflict over dowry were observed to be significantly more in patients during life time but not during 6 months prior to the onset of illness. On the other hand, 4 other life events such as major purchase or construction of house, failure in examination, appearing for interview and getting engaged or married were found to be significantly more frequent in patients during the 6 months prior to the onset of illness but not during life time. Thirty one life events were observed to be significantly more in the patient group both during life time and 6 months prior to the onset of illness.

Discussion

The present study is a definite improvement over several other studies done in this area. The study was conducted on a homogeneous diagnostic group selected according to research diagnostic criteria. Life events, both recent and life time were studied with the help of a scale specially devised for and suited for the Indian population and special attention was paid to accurate dating of life events. Comparison

Table 2
Frequency of life events experienced by patients and controls

Life Events	Life Time Occurrence			Past 6 Months Occurrence		
	Patient Group Mean \pm SD	Control Group Mean \pm SD	Z	Patient Group Mean \pm SD	Control Group Mean \pm SD	Z
Total	35.26 \pm 8.68	15.83 \pm 4.11	17.3358*	15.87 \pm 4.41	2.81 \pm 1.44	24.8809*
Desirable	8.14 \pm 3.95	6.02 \pm 2.44	3.8225**	1.86 \pm 1.51	0.45 \pm 0.69	7.3094*
Undesirable	21.27 \pm 5.71	6.40 \pm 2.11	21.4018*	11.12 \pm 3.65	2.26 \pm 1.29	20.1180*
Ambiguous	5.92 \pm 2.85	3.26 \pm 1.79	6.5517*	3.01 \pm 1.30	0.26 \pm 0.49	17.320*
Personal Life Events	19.89 \pm 4.19	8.43 \pm 2.76	18.8146*	10.27 \pm 2.86	1.40 \pm 1.40	23.6912*
Impersonal	15.29 \pm 5.63	6.94 \pm 2.75	11.3822*	5.56 \pm 2.52	1.66 \pm 1.07	12.3378*

* $P < .000000001$; ** $P < .001$.

Table 3
Comparison of stress scores of events experienced by patients and controls

Events	Life Time Occurrence			Past 6 Months Occurrence		
	Patient Group N = 84 Mean SD	Control Group N = 47 Mean SD	Z	Patient group N = 84 Mean SD	Control group N = 47 Mean SD	Z
Total stress score	1721.51 \pm 420.86	750.04 \pm 197.08	17.9318*	740.85 \pm 217.49	140.55 \pm 70.31	23.2211*
Desirable stress score	371.49 \pm 188.93	286.91 \pm 125.30	3.0701**	75.10 \pm 61.75	19.27 \pm 30.26	6.9315*
Undesirable stress score	1139.36 \pm 334.66	359.95 \pm 135.93	18.7582*	570.09 \pm 193.66	116.66 \pm 59.68	19.8412*
Ambiguous stress score	197.73 \pm 101.21	104.62 \pm 57.12	6.7154*	99.62 \pm 48.34	7.85 \pm 15.07	16.0605*
Personal stress score	894.38 \pm 197.18	351.00 \pm 128.39	19.0503*	472.61 \pm 136.14	56.62 \pm 39.14	26.1408*
Impersonal stress score	816.07 \pm 298.03	372.64 \pm 154.52	11.2075*	266.45 \pm 127.96	86.36 \pm 50.24	11.4213*

* $P < .000000001$; ** $P < .001$.

Comparison was made with life events experienced by controls from the same population.

A significant difference in the frequency and stress scores of life events experienced by patients and controls was observed. The higher frequency of recent (6 months) life events points to the impor-

tance of recent life stresses in the causation of anxiety neurosis. There is ample literature demonstrating the significance of recent life events experienced in the past 3 months (Cooper and Sylph 1973; Miller et al. 1976) and life events experienced during the past one year (Bhatti and Channabasavanna 1985) in neurotic illness. The

observation of higher life time occurrence of life events in patients in the present study shows that life time stresses are also of causal significance.

Despite the confounding of the separate measures in several studies life change (adjustment) and emotional distress (undesirability) have been clearly conceptualized as distinct. Dohrenwend (1973) and Gersten et al. (1974) have compared the relation of events scaled for 'life change' and for 'undesirability' with neurotic illness. Dohrenwend (1973) in her retrospective study showed that life change measures are more powerful indicators of adult neurotic impairment, than undesirability. However, in a 5 year prospective study Gersten et al. (1974) observed that the undesirability measures were more powerful predictors of disturbed childhood behaviour. Tennants and Andrews (1978) investigated 803 neurotics and reported that it is indeed the distressing quality of life events and not merely the change they produce that is associated with neurotic impairment.

Singh et al. (1984) have reported that some events are commonly experienced by the general population e.g. death of close family member, getting engaged or married, pregnancy of wife, illness of family member etc. as compared to death of spouse, divorce, wife begins or stops work and outstanding personal achievement, which are experienced less often in the population. Our observations are in keeping with Singh et al. (1984). While comparing frequency of life events in patients with that of controls, it was observed that a variety of events were significantly more frequent in the patient group. Among these 33 events relating to personal, social, sexual, educational, occupational, marital and financial areas were observed significantly more in patients both during life time

and 6 months prior to the onset of the illness. Four events namely, suspension from job, theft or robbery, broken engagement or love affair and conflict over dowry were significantly more common in patients during 6 months prior to the onset of illness. Four other events namely major purchase or construction of house, failure in examination, appearing for interview and getting engaged or married were observed to be significantly more common during life time in patient group. Thus patients experienced a variety of life events in different walks of life more often than controls.

Barrett (1979) observed that events, having to do with performance, were experienced as more stressful by those with anxiety disorders, compared to those with depressive disorders. In the study of Bhatti and Channabasavanna (1985) on neurotics, stress in the area of education, important academic failure and 'prepare or take an important examination', was found to have a definite relationship with anxiety neurosis. Both these items being related to performance. In the present study items related to education, failure in examination ($P < 0.01$) and appearing for interview ($P < 0.03$) were found to be significantly more in patients than in controls during the 6 months prior to the onset of illness.

Some of the limitations of the present work need to be mentioned here. The scale utilized for evaluating life events was not an ideal one. Certain qualitative aspects of the stressful life event did not receive sufficient attention. These are: dependent versus independent, lack of control versus under control, experienced versus imagined, anticipated versus non-anticipated, novel versus old experience, acute versus chronic etc. The present investigation followed the arbitrary categorisation of events into various groups undesirable, desirable, ambiguous, personal and imper-

sonal, adopted by Singh et al. (1984). It would have been ideal if each event was rated and analysed separately for each of the qualitative variables cited above. Summation of life event scores was done which may be an over simplification and may not be valid.

The controls in the present study were relatives of medical patients, yet they did not have increase in life events. This was possibly because their relatives were admitted for treatment of acute medical illness and the illness period was not included in the time period covered for eliciting life events.

Although cases of only definite onset were taken and special attention paid to accurate dating of events, there remains a possibility of confounding of the results. Certain events could possibly have been manifestations of anxiety neurosis itself. This inference is drawn from the observation of some day to day occurrences which were reported significantly more by patients than controls. Also, retrospective contamination i.e. the need to justify illness may be responsible to some extent for this source of error.

It has often been contested and rightly so, that merely exposure to stressors is not a sufficient explanation for onset of illness in ordinary human experience. There are certain other factors which require equal consideration. The buffering model posits that stress has a greater impact on those with limited as opposed to adequate sources of social support (Aneshensel and Stone 1982). Work in this area has been done and shall be reported in a separate paper.

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