

## LIFE EVENTS IN DEPRESSION<sup>1</sup>

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There has been a long standing interest in the possible association of stress with illness. A host of studies have suggested a positive relationship between life events and physical illness (Wolff, 1950; Schmale and Engel, 1967; Holmes and Rahe, 1967; Grant et al, 1974). A similar relationship between the onset of psychiatric illness and life events has also been observed but with lesser consistency (Brown and Birley, 1968; Eisler and Polak, 1971; Uhlenhuth and Paykel, 1972). Studies pertaining to relationship of life events and depression have been quite a few (Cohen et al., 1954; Forrest et al., 1965; Paykel et al., 1969; Patrick et al., 1978).

There is a striking dearth of reports related to life events and depression in Indian literature. Employing a well structured scale for life events, Venkoba Rao and Nammalvar (1976) studied a total of twenty five depressed patients in South India. The authors reported that the depressives though experiencing the same number of life events as the controls, suffered more distressing events as indicated in the mean distress scores. There was a clustering of events during the 2 year period preceding the illness. In their further work Venkoba Rao and Nammalvar (1977) matched the life events before and after the treatment in depression and observed that a high score

persisted even after the treatment. Recently, Sethi and Prakash (1979) studied a group of 40 primary depressives with Paykel's inventory and compared their life events from those of a control group consisting of an equal of schizophrenic subjects. The investigators reported that the depressives experienced a significantly higher number of life events than schizophrenics. It can not be overemphasized that in such a study control is crucial but there are several problems in selecting control groups for the study of psychiatric patients. For example, a control group of hospitalized patients may be inappropriate in that the onset of some physical illness and/or the fact of being admitted to hospital may in itself be associated with an increased frequency of life events (Hudgens, 1973). Alternatively, a healthy population as compared to a hospital-patient group may be "too well", in that pathology and care seeking are not comparable as between normal and psychiatric groups. Further, healthy subjects may report fewer events since they are not exposed to same kind of interviewing as psychiatric patients. Hence ideal control would be to compare psychiatric patients with two above mentioned groups.

The present work was undertaken with the objective of studying frequency of occurrence and the pattern of life events prior to the inception of illness in primary

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depressives and to compare these observations with those of control group consisting of schizophrenics.

#### MATERIAL AND METHODS

One hundred primary depressives (62 M, 38 F) whose age ranged from 21 to 65 years comprised the sample for the present investigation. The diagnostic work-up of cases was based on the research criteria as proposed by Feighner et al. (1972). Each primary depressive was administered a life event scale which was devised by Paykel et al. (1971). The latter consists of a total of sixty one life events of wide and diverse nature. After explicitly explaining the objective and mode of administering, each patient was asked to clearly state what, if any, of the sixty one events had taken place over a span of six months and one year prior to the onset of illness. An equal number of schizophrenics again so diagnosed in accordance with the St. Louis Criteria, who were group matched with the depressives in respect of age, sex and the economic status, served as controls for comparing the pattern of life events of depressed population.

#### OBSERVATIONS

Table-1 shows the mean number of events experienced by the two groups of patients. While the depressive reported a mean of 1.44 and 2.47 life events over a period, respectively, of 6 months and one year prior to the inception of their illness, an equal number of controls who consisted of schizophrenics (N=100), had a mean of 1.01 and 1.83 events during the corresponding periods. Thus, it was observed that the depressives had experienced significantly higher ( $p < 0.001$ ) number of life events than controls during the specified periods of time (Six months and one year).

Table-2 describes life events of patients of experimental and control groups. Only those items have been included in this table which were reported by at least 4

patients. The total responses of both groups of patients were scrutinized for all the sixty one events which comprised the inventory. Statistical analysis between the two groups was carried out using  $X^2$  test for each items eparately.

TABLE 1—Mean Life Events

	6 months		1 year	
	Mean	s.d.	Mean	s.d.
Depression (N=100)	1.44	0.78	2.47	0.92
Schizophrenia (N=100)	1.01	0.62	1.83	0.83

Dep. Vs. Schizo. (6 months) :  $t=4.33, p < .001$   
(1 year) :  $t=5.19, p < .001$

It was found that significantly fewer depressives than schizophrenics reported events related to the illness of family members during six months before the onset of illness ( $p < 0.05$ ). Similarly, a significantly less number of depressives reported life events pertaining to minor personal illness when compared with diagnosis for the period of one year preceding the onset of illness ( $p < 0.5$ ). However, a significantly higher number of depressives experienced life events related to death of family members when compared with schizophrenics in terms of one year's period prior to the onset of illness ( $p < 0.01$ ).

Table-3 shows the life events of depressed and control subjects which have been grouped in ten categories derived from a total of 61 life events. On comparing the two groups a significant difference ( $p < 0.001$ ) in the frequency of occurrence was found only in relation to educational life events during the preceding one year. A comparison of events of preceding 6 month period, however, did not reveal any significant difference between the two groups of patients.

TABLE 2—*Individual Events*

EVENTS	6 MONTHS					1 YEAR				
	Depression (144)		Schizo (101)			Depression (247)		Schizo (183)		
1. Serious Personal illness	28	19.4	16	15.8	NS	40	16.2	23	12.6	NS
3. Minor Personal illness	4	2.8	7	6.9	NS	4	1.6	10	5.5	p<0.5
4. Illness of family members	3	2.1	8	7.9	p<0.05	11	4.4	13	7.1	NS
11. Death of Family member	9	6.3	4	4.0	NS	16	6.5	4	2.2	p<.01
15. Serious argument of problems with household members	4	2.8	5	5.0	NS	6	2.4	7	3.8	NS
19. Major financial stress	8	5.6	3	3.0	NS	18	7.3	16	8.7	NS
19. Minor financial stress	26	18.1	15	14.9	NS	46	18.6	25	13.7	NS
22. Serious argument with family member	2	1.4	3	3.0	NS	5	2.0	3	1.6	NS
28. Adoption of child	4	2.8	0	..	NS	4	1.6	0	..	NS
42. Unemployment	4	2.8	1	1.0	NS	6	2.4	2	1.1	NS
43. Punishment in office	3	2.1	0	..	NS	4	1.6	0	..	NS
44. Promotion	5	3.5	0	..	NS	6	2.4	2	1.1	NS
57. Law Suit	6	4.2	2	2.0	NS	8	3.2	4	2.2	NS

TABLE 3—*Type of Life Events in Depression and Schizophrenia*

	6 MONTHS					1 YEAR				
	Depression N %		Schizophrenia N %			Depression N %		Schizophrenia N %		
I. Health	40	27.8	33	32.7	N.S.	63	25.5	50	27.3	N.S.
II. Bereavement	11	7.6	8	7.9	N.S.	25	10.1	11	6.0	NS
III. Friends & Relative	16	11.1	15	14.9	NS	25	10.1	21	11.5	NS
IV. Financial	36	25.0	18	17.8	NS	66	26.2	41	22.4	NS
V. Family/Social	17	11.8	10	9.9	NS	30	12.1	17	9.3	NS
VI. Occupation	17	11.8	6	5.9	NS	26	10.5	14	7.1	NS
VII. Education	0	0.0	4	4.0	NS	0	..	15	8.2	p<.001
VIII. Legal	6	4.2	3	3.0	NS	8	3.2	7	3.8	NS
IX. Migration	0	..	2	2.0	NS	1	0.4	4	2.2	NS
X. Others	1	0.7	2	2.0	NS	3	1.2	3	1.6	NS

## DISCUSSION

The establishment of association of psychosocial stress with emotional health would depend on a variety of complex phenomena, an individual's capacity to absorb stress and the availability of social support. It is a common clinical interpretation that the psychiatric patients frequently tend to perceive their environment differently and therefore find it difficult to cope with (Lipowski, 1977). Perhaps such a view in relation to depression is further reinforced by the concept of cognitive distortion as proposed by Beck (1967). Artifactual reportings of life experiences by psychiatric patients led Grant et al. (1976) to issue a word of caution, "that future life-event research with psychiatric subjects should employ population specific event weights rather than existing norms". In fact this important observation and suggestion of Grant et al. (op cit) rightly and timely dissuaded us from undertaking a study of qualitative and quantitative aspects of distress as the population-specific event weights are unavailable for this country. Consequently, we have confined our study only to the numerical aspect of various life events in depression.

As the assessment of life events is chiefly a retrospective exercise and "magnification" of life events is an invariable feature of total reporting, we preferred to compare primary depressives with schizophrenics which would minimize wide differences of artifactual reporting. It was observed that more depressives than schizophrenics reported a higher mean of events to have occurred during the periods of six months (Dep.=1.44; Schizo.=1.01) and one year (Dep.=2.47; Schizo.=1.83). The difference was highly significant ( $p < 0.001$ ). Although it is slightly difficult to explain the difference in the frequencies of life events, our observation that the schizophrenics experienced fewer events before onset than depressives, is consistent with the observations made by Jacob *et al.* (1975).

Also the present observations substantiate the findings of one of our recent study (Sethi and Prakash, 1979) wherein the schizophrenics were found to have reported significantly fewer events than the experimental group which consisted of primary depressives. While, admittedly we have not been able to replicate the findings of our earlier study particularly in respect of the pattern of life events, it may well owe to a larger size of the samples which were screened in the second instance. Notwithstanding it would not appear wise to generalise the findings, specifically so in view of the methodological problems which as said earlier, the study of life events is beset with in different cultures.

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