PSYCHOLOGICAL DETERMINANTS OF DEPRESSION IN OLD AGE

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SUMMARY

The present study investigated the role of recent life events and other psychological factors relating to alienation, hopelessness, personality dimensions and religiosity in patients with first episode of depression in old age. A sample of 50 subjects who had first episode of depression at or after the age of 50 were selected from Psychiatric Centre, Jaipur along with a matched sample of 50 normal controls. They were subjected to different psychological scales viz. socio economic status, life events, alienation, hopelessness, religiosity and P.E.N. Inventory. Results of the study disclosed that life event relating to financial problems occurred with greatest frequency in old age depression as compared to normal controls. As regards to marital status, widowed were more in depressed group (30%) as compared to control group (8%). Furthermore, patients with old age depression had significantly more alienation, hopelessness, neuroticism and psychoticism as compared to their normal counterparts. They scored significantly lesser on Extroversion than the controls. No significant differences were seen in the two groups with respect to attitude toward religion. No effect of domicile was observed on different psychological variables. Significance of these findings is discussed.

Introduction

The probability of developing mental illnesses of several kinds, particularly depressive in nature increases steeply after middle age. A number of surveys of the aged in the community at large from the West for instance, have shown in recent years a high prevalence of both functional and organic psychiatric disorders among elderly people (Kay, Beamish & Roth 1964 a; Copeland et al. 1975). Similar trends have also been observed in some Indian studies (Ramachandran et al. 1979, 1981, 1982; Venkoba Rao et al. 1972, 1981, 1982).

Several researchers have examined genetic, biochemical, sociocultural and demographic factors in depression, in general but the role of psychological factors have been overlooked. Some Western and Indian studies are replete in disclosing the importance of socio-cultural and demographic determinants in depression of old age. Blazer and William (1980), for example, in a community survey on elderly depressed patients found higher percentage of widowed individuals in depressed group as against to controls (55.8 % v/s. 44.4 %). The study further added the importance of the impairment in social and economic resources and activity of daily life. As regards to Indian studies, Venkoba Rao and Virudha Girinathan (1972) observed the value of break up of joint family in the development of depression in old age. Another Indian study by Anantharaman (1975) similarly reported poor adjustment in old persons living in nuclear families and in those who had lost their spouses. Oft quoted Indian study on depression in old age is that of Ramachandran et al. (1979, 1981, 1982). These researchers again revealed that the nuclear

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family system and widowed state are significantly correlated with functional disorders.

Of the psychological variables in depression only life events has aroused great interest. Research studies by Paykel et al. (1957, 1969, 1971), Brown et al. (1973) and Horowitz et al. (1977) can be considered as representative studies in this area, stressing the role of life events in depression. Similarly Indian studies by Venkoba Rao and Nammalver (1976), Sethi and Prakash (1979), Satija, Nathawat and Shah (1982) and Satija, Nathawat and Sharma (1983) also substantiated the Western observation that life events play a significant role in the genesis of depression.

With regard to role of other psychological variables such as alienation, hopelessness, personality makeup, religiosity and other psychogenic factors in old age depression have received scanty attention and therefore, it occurred to the present investigators to study the role of some of these psychological variables in these subjects who entertained first episode of depression at or after the age of 50 with following aims:

1. To study the significance of recent life events in patients aged 50 and above.
2. To find out the role of alienation, hopelessness, personality makeup and religiosity in the development of depressive psychopathology of old age.

Sample

It was proposed to study the following two groups of subjects.

1. 50 consecutive depressed patients attending O.P.D. at Psychiatric Centre, Jaipur of age 50 and above who suffered from depression for first time in life.
2. 50 normal controls matched on age, sex, and socio-economic status were taken. They included patients escorts, eg. friends, neighbours and distinct relatives.

Instruments of Study

1. Proforma. A specially designed proforma was used for a thorough evaluation of the patients relating to socio-demographic and psychiatric variables.
2. Socio-Economic Status Scales. Two socio-economic status scales were used to match the subjects of experimental and control groups. These scales included:
   (i) Socio Economic Status Scale by Pareek and Trivedi (1964).
   (ii) Socio Economic Status Scale by Kuppuswamy (1976).
   Since the subjects of the study belonged to both rural and urban domicile, these two different scales were used.
3. Presumptive Stressful Events Scale. In order to find out occurrence of recent life events in the subjects presumptive stressful events scale developed by Gurmeet Singh (1981) containing a list of 51 life events was used which is suitable and standardized on Indian population.
4. Dean’s Alienation Scale. Dean has developed 3 subscales to measure powerlessness, normallessness and social isolation. He combined these subscales to makeup an alienation scale. It consists of 24 items, of which 9 measure powerlessness, 6 normallessness and 9 items measure social isolation. The test is reported to be reliable and valid measure of alienation (Sharma, Uma 1980).
5. Hopelessness Scale. Beck et al. (1975) devised a test to measure the cognitive component of depression, which they labeled hopelessness. The test consists of
20 items (statements) related to hopelessness. Hindi version of the test was used (Tiwari, Krishna, 1980).

6. **P.E.N. Inventory.** P.E.N. Inventory derived from “Eysenck Personality Questionnaire” has been developed by H. J. Eysenck and S.B.J. Eysenck. It measures 3 orthogonally independent dimensions of temperament viz. Extroversion-Introversion, Neuroticism - stability, and Psychoticism - Tough mindedness. These 3 principal dimensions are regarded as reflecting the measure variance in the personality domain. Standardized Hindi version of the Inventory developed at P.G.I., EMR, Chandigarh has been employed in the present study (Menon & Verma, 1982).

7. **Attitude Scale for Religion.** The present scale was constructed in 1967 as a work for Ph.D. dissertation by Tondon (1974), from Agra University. It is a Likert type scale deploying 50 statements to be answered on a 5 point scale. Test is reliable and valid measure of religiosity (Tondon, 1974, Mathur & Nirmal, 1982).

**Procedure**

All the patients of age 50 and above attending O.P.D. at Psychiatric Centre, Jaipur during the period from April, 1983 to June 1983 were first evaluated by a consultant psychiatrist and a clinical diagnosis was made on the basis of I.C.D.-9 criteria. The 50 consecutive patients who qualified criteria for depressive illnesses were subjected to detailed evaluation by a specially designed proforma. All these patients were given either socio economic status scale (Rural) by Pareek and Trivedi (1964) or Socio Economic Status Scale (Urban) by Kuppuswamy (1976) depending upon their domicile affiliation. In order to study the significance of recent life events these patients were given Presumptive Stressful Events Scale (Gurmeet Singh, 1981) suited to Indian culture and patients were asked to check the life events which occurred to them within one year prior to the onset of illness. Finally, these subjects were given hopelessness scale, Dean's alienation scale, P.E.N. Inventory and Attitude scale for religion in order to determine the role of hopelessness, alienation, personality make-up and religiosity in depression.

A group of 50 normal controls matched on age, sex, and Socio Economic Status preferably escorts of the patients were subjected to detailed evaluation as done for experimental group.

**Results**

| Diagnostic Category                      | No. | Percentage |
|------------------------------------------|-----|------------|
| **Organic Mental disorder:**             |     |            |
| 290.4 arteriosclerotic dementia          | 7   | 5.38%      |
| 290.0 Senile dementia, simple type       | 3   | 2.31%      |
| 225 Epilepsy                             | 2   | 1.54%      |
| **Functional disorders:**                |     |            |
| 296.1 MDP depressed type                 | 50  | 38.46%     |
| * Other depressions                      | 11  | 8.46%      |
| 296.0 MDP manic type                     | 25  | 19.23%     |
| 295 Schizophrenic Psychosis              | 21  | 16.15%     |
| 297.2 Paraphrenia                        | 5   | 3.85%      |
| 300.0 Anxiety States                     | 3   | 2.31%      |
| 300.1 Hysteria                           | 2   | 1.54%      |
| 304.0 Morphine dependence                | 1   | 0.77%      |
| **Total**                                | 130 | 100%       |

* Other depression include other nonorganic psychosis depressive type (298.0), Neurotic depression (300.4) and depressive disorders not elsewhere classified (311).
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Table 2

Socio-Demographic Characteristics of the Subjects

| Variables                     | Elderly Depressed Patients | Normal Controls | Controls |
|-------------------------------|-----------------------------|-----------------|----------|
|                               | Urban N = 34 | Rural N = 16 | Total N = 50 | Urban N = 29 | Rural N = 21 | Total N = 50 |
| (i) Age                      | 50-79 | 50-69 | 50-79 | 50-76 | 50-72 | 50-76 |
| Age range (in years)         | 59.4 | 58.1 | 58.75 | 59.0 | 55.3 | 57.50 |
| = mean age                   | 59.4 | 58.1 | 58.75 | 59.0 | 55.3 | 57.50 |
| (ii) Sex                     | Male | 13   | 14   | 27   | 15   | 16   | 31   |
|                             | Female | 21   | 2   | 23   | 14   | 5   | 19 |
| (iii) Socio Economic Status  | I    | 1    | 0    | 1    | 4    | 0    | 4    |
|                             | II   | 2    | 2    | 4    | 9    | 1    | 10   |
|                             | III  | 8    | 5    | 13   | 8    | 4    | 12   |
|                             | IV   | 21   | 7    | 28   | 8    | 11   | 19   |
|                             | V    | 2    | 2    | 4    | 0    | 5    | 5    |
| (iv) Marital Status          | Single | 0    | 0    | 0    | 0    | 0    | 0    |
|                             | Married | 22   | 12   | 34   | 26   | 20   | 46   |
|                             | Widowed | 12   | 4    | 16   | 3    | 1    | 4    |

\[ X^2 = 5.45; \quad df = 2 \quad p > .05 \text{ (n.s. differences in SES of U & R)} \]

Note: Since measurement of socio economic status includes information of education, occupation, income etc., details of these variables are not provided.

Table 3

Mean and S.D. scores for Alienation, Hopelessness, P.E.N. Inventory and Religiosity of two groups of subjects

| Variables | Elderly Depressed Patients (N = 50) | Normal Controls (N = 50) | Control Ratio (C.R.) | Significance (P) |
|-----------|-------------------------------------|--------------------------|----------------------|------------------|
|           | Mean S.D.                           | Mean S.D.                |                      |                  |
| Alienation| 71.2 14.51                          | 43.4 15.65               | 9.42                 | .001             |
| Hopelessness| 14.7 4.81                         | 3.3 2.98                 | 14.25                | .001             |
| PEN       | P 5.3 2.27                         | 2.5 1.81                 | 6.67                 | .001             |
| Inventory| E 4.4 3.63                         | 10.5 3.79                | 8.24                 | .001             |
| Score     | N 12.6 3.47                        | 4.6 2.72                 | 12.90                | .001             |
|           | L 7.5 2.01                         | 8.1 4.12                 | 0.94                 | n.s.             |
| Religiosity| 227.4 43.54                        | 213.4 41.33              | 1.65                 | n.s.             |

\( P = \text{Psychotism}; \quad E = \text{Extroversion}; \quad N = \text{Neuroticism}; \quad L = \text{Lie} \)

Discussion

It is seen from Table No. 1 that 47% of the patients suffered from depressive illness. One of the important findings emerged from the patients study relates to the relationship between recent life events and depression where it was found that of the 51 life events financial loss or problem emerged out at the most frequently occurring life event, in depressed patients being present in 40% of the subjects. Regarding significance of these life events in our culture, it is understandable as to why financial loss or problem came out to be most frequently occurring life event. In fact our overwhelming majority of the population live below the poverty line. The results of this study conforms the findings of Sarija.
Table 4
Frequency of Recent Life Events (Last one year) in two groups of subjects

| Sl.No. | Life event                                      | Elderly Depressed | Normal Controls |
|--------|------------------------------------------------|-------------------|-----------------|
|        |                                                | Urban Rural Total | Urban Rural Total | P.   |
| 1.     | Financial loss or problems                     | 18 2 20           | 3 2 5            | <.05 |
| 2.     | Death of spouse                                | 7 4 11            | 1 1 2            | <.05 |
| 3.     | Major personal illness                         | 6 4 10            | 4 0 4            | n.s. |
| 4.     | Family conflict                                | 9 1 10            | 2 0 2            | <.05 |
| 5.     | Death of close family member                   | 5 1 6             | 4 1 5            | n.s. |
| 6.     | Marital conflict                               | 6 0 6             | 1 1 2            | n.s. |
| 7.     | Self or family members unemployed             | 5 1 6             | 2 0 2            | n.s. |
| 8.     | Property or crops damaged                      | 1 4 5             | 1 4 5            | n.s. |
| 9.     | Illness of family member                       | 5 0 5             | 9 2 11           | n.s. |
| 10.    | Lack of son                                    | 2 2 4             | 1 0 1            | n.s. |
| 11.    | Large loan                                     | 4 0 4             | 0 0 0            | <.05 |
| 12.    | Marriage of daughter or dependent sister       | 4 0 4             | 2 0 2            | n.s. |
| 13.    | Trouble with neighbour                         | 2 2 4             | 2 0 2            | n.s. |
| 14.    | Change in sleeping habit                       | 3 1 4             | 1 0 1            | n.s. |
| 15.    | Lack of child                                  | 3 0 3             | 0 0 0            | n.s. |
| 16.    | Excessive alcohol or drug use by family member | 2 0 2             | 0 0 0            | n.s. |
| 17.    | Suspension or dismissal from job               | 1 0 1             | 0 0 0            | n.s. |
| 18.    | Robbery or theft                               | 1 0 1             | 0 0 0            | n.s. |
| 19.    | Retirement                                     | 1 0 1             | 0 0 0            | n.s. |
| 20.    | Reduction in No. of family function           | 1 0 1             | 0 0 0            | n.s. |
| 21.    | Change in social activity                      | 1 0 1             | 0 0 0            | n.s. |
| 22.    | Broken engagement or love affairs              | 0 0 0             | 1 0 1            | n.s. |
| 23.    | Conflict over dowry (self or spouse)           | 0 0 0             | 1 0 1            | n.s. |
| 24.    | Major purchase or Construction of house        | 0 0 0             | 1 0 1            | n.s. |
| 25.    | Going on to pleasure trip or pilgrimage        | 0 0 0             | 2 0 0            | n.s. |

Note: The life events which did not figure at all the groups are deleted from the main table.

and Nathawat (1983). The life events related to bereavement like death of spouse or death of close family member and marital and family conflicts were found more frequently occurring in depressed patients as compared to control group. The loss of a significant loved object has always been considered as very stressful in all cultures. It is seen in the present study that widowed were more in depressed group (30%) as compared to control group (8%) and in widowed also females were more (18%) than
male (12%). It is because widowed state leads to feelings of loneliness, lack of purpose and dissatisfaction in life. Furthermore, in some it leads to loss of income and lowering of social status. Significant association of widowed state to psychiatric illness in old age has been reported by Ram Chandran et al (1979, 81, 82). Similarly the marital and family conflicts which are common in our culture because of arranged marriages, poverty, illiteracy, difficulty in getting divorce and joint family system, also subject a person to constant mental tension. These findings are in line with Paykel et al (1969). Venkoba Rao (1976) has also observed that bereavement is the most frequent life event present in depressives. Among other frequent life events were unemployment and crops and property damage. These life events have also been reported by depressives more frequently and considered stressful because they all ultimately have financial implications. In the present study it was also observed that the average number of life events expressed by a depressive one year prior to the onset of depression (2.3) was about 2 and half time more than that experienced by a normal control in the same period (1.0). This conforms the findings of Paykel et al (1969) who observed that depressed patients reported 3 times as many life events in the 6 months period prior to the onset of depressive episode as were reported by controls. Furthermore, results have also been analysed for rural and urban samples separately. Similar trends were observed except that average number of life events were slightly more in Urban sample as compared to Rural sample both in depressives as well as controls (2.5 v/s 1.5 and 1.3 v/s. 0.5).

As regards to other observations, there was marked significant difference in the alienation scores of the two groups of subjects showing that depressed persons were more alienated than normal individuals. This conforms the finding of Saligman (1975), Meissner (1974) and Martin (1974) who had showed a positive correlation of depression and hopelessness to alienation. Furthermore, depressed persons were more hopeless about their future as compared to normal persons, as inferred through the results obtained on hopelessness scale. It is in confirmation with the observation made by Minkoff et al (1973).

As regards to relationship between different components of personality like 'Psychotism' 'Extroversion' and 'Neuroticism' and depression, it was found that there were highly significant differences in the scores of these 3 components of personality between the two groups of subjects with mean scores of Psychoticism and Neuroticism being higher in the experimental group. These finding support the hypothesis that persons with more component of Psychoticism and Neuroticism in their personality are more prone to suffer from depression than with persons with contrary findings, whereas on the dimension of extroversion patients with old age depression scored significantly lesser as compared to their normal counterparts. We have no such study to compare our results. These findings are to be confirmed by further studies as they may be simple associational. No significant difference existed in the lie scores of P.E.N. Inventory.

Regarding religiosity scores of the two groups of subjects, it was seen that no significant differences existed between the two. This finding rejected the notion that depression is less common in more religious persons because the persons in both the groups were highly religious which is a characteristic of Indian culture.
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