FAMILY STRUCTURE AND MENTAL ILLNESS IN OLD AGE

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SUMMARY

A random sample of subjects aged over 60 in the community was studied. Out of 181 subjects studied 50 were found to suffer from functional disorders such as depression and anxiety, and 11 from organic brain syndrome. 120 are found psychiatrically normal. Over 50% of the elderly subjects studied were widowed and about 70% were unemployed and nearly 80% belonged to lower middle class and low socio-economic group.

The families of the elderly subjects and their living condition were studied in detail. The family was divided into 'joint', 'nuclear' and loosely joint' on the basis of living arrangement, financial support and other help they received. Functional disorders were found high in old age subjects living in nuclear family and living alone. 33 psychosocial variables affecting the health of the elderly subjects were studied and their correlation to psychiatric illness was determined by computer. Further factorial analysis was carried out, and three factors were extracted. It was found that Factor II and Factor III were about family and living conditions. Hence it could be stated that the family and living conditions are significant factors affecting the mental health of the elderly subjects.

There is a widespread belief that psychiatric disorders in old age are infrequent in our country as compared to the West. Joint family system or other cultural practices which provide satisfaction and security to the old may account for this. Elderly are held with reverence and they are consulted in matters of marriage, property and other family transactions. They are a symbol of family unity or continuity. In the traditional three generation family in the village, they gain satisfaction in providing training to the young in the art of family tradition. The aged in India have no fear of being cast aside in 'homes for the aged'.

Dube (1970), Sethi et al. (1972) and Verghese et al. (1973) studied the prevalence of psychiatric disorders in the community, and they had also commented on the family structure and mental illness. In their study all age groups were studied and hence it was not possible to determine the family structure in particular of old age subjects and its association to emotional disorders. A study of elderly subjects was however done on a hospital population by Rao (1972).

AIM

The aim of this study was to examine the family structure and family cohesion of elderly subjects in the community and to examine its relationship with emotional disorders.

MATERIAL AND METHOD

Poonamallee, a small town, 19 kms. from Madras, having a population of 18,721, in which are 861 subjects all aged over 60 years, was chosen for the study. Most of its population is engaged in agricultural work, and some are employed as skilled or semi-skilled workers in nearby industries, belongs to lower middle class and possess poor socio-economic status.

A systematic random sampling procedure was employed and 20% of the old age population was studied. House to house visits were made by a team consisting of a psychiatrist, psychiatric social worker, and Mid-wife or public Health Visitor of the area. The public Health Worker visited each family once a fortnight for ante-natal check up, preventive and immunization work, and thus knew the families well.

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Interviewing of the subjects was done by the Psychiatrist using a special proforma. The proforma employed is a modified version of the one used by Kay et al. (1964) in their study of old age subjects in New Castle.

Psychiatric diagnosis was made when the subjects manifested disturbances of mental functioning, specific enough in clinical character to be consistently recognizable on conforming to clearly defined standard pattern and were severe enough to produce at least partial loss of working and/or social capacity.

181 subjects were studied. 11 subjects were diagnosed as suffering from organic psychosis. The diagnosis in them was confirmed by further assessment at the local hospital and the dementia in them was rated using ‘Dementia Scale’ described by Blessed et al. (1968). In 4 cases the mental deterioration was mild and in the rest it was moderate to severe.

In 50 subjects a diagnosis of functional disorder was made. Two-third of them were persuaded to call at Mental Health Centre at Poonamallee itself for assessment and treatment. They were examined by another Psychiatrist at the centre. There was agreement in the diagnosis in 96% of cases. The functional disorders were classified as mild, moderate and severe depending on the severity of the symptoms and the extent of the disability. In 29 subjects the illness was judged to be of only mild degree.

The following Table gives the prevalence rate of psychiatric disorders in subjects aged over 60 (N=181).

| Diagnosis                        | Number (181) | Rate per 1000 |
|----------------------------------|--------------|---------------|
| Organic Disorders                |              |               |
| Arteriosclerotic psychosis       | 9            | 60.8          |
| Senile Psychosis                 | 2            |               |
| Functional Disorders             |              |               |
| Depression                       | 38           |               |
| Anxiety                          | 2            | 276.2         |
| Hypochondriosis                  |              |               |
| Personality Disorder (Passive Aggressive) | 8    |               |
| Total                            | 61           | 337.0         |

Table II gives the sex, age group, civil status, occupational status and social class distribution of normal, functional and organic psychiatric subjects aged over sixty.

| Sex                     | Normal (N=120) | Functional (N=50) | Organic (N=11) |
|-------------------------|----------------|-------------------|----------------|
| Male                    | 57             | 18                | 9              |
| Female                  | 63             | 32                | 2              |
| x²=1.89, d.f.=1, N.S.    |                |                   |                |

| Age-group (in years)     | Normal (N=120) | Functional (N=50) | Organic (N=11) |
|-------------------------|----------------|-------------------|----------------|
| 61-65                   | 62             | 23                | 3              |
| 66-70                   | 33             | 12                | 4              |
| 71-75                   | 14             | 3                 | 1              |
| 76+                     | 11             | 14                | 3              |
| x²=1.70, d.f.=3, N.S.    |                |                   |                |

| Civil Status            | Normal (N=120) | Functional (N=50) | Organic (N=11) |
|-------------------------|----------------|-------------------|----------------|
| Married                 | 55             | 19                | 4              |
| Single                  | 3              | 0                 | 1              |
| Widowed                 | 61             | 30                | 6              |
| Divorced and separated  | 1              | 1                 | 0              |
| x²=0.06, d.f.=1, N.S.    |                |                   |                |

| Social Class            | Normal (N=120) | Functional (N=50) | Organic (N=11) |
|-------------------------|----------------|-------------------|----------------|
| Upper                   | 1              | 0                 | 0              |
| Upper middle            | 1              | 0                 | 1              |
| Middle                  | 27             | 2                 | 1              |
| Lower middle            | 41             | 17                | 5              |
| Lower                   | 50             | 32                | 4              |
| x²=7.05, d.f.=1, P<.01   |                |                   |                |

| Occupation              | Normal (N=120) | Functional (N=50) | Organic (N=11) |
|-------------------------|----------------|-------------------|----------------|
| Employed (full or part time) | 94             | 28.8              | 9              |
| Unemployed              | 86             | 71.7              | 10             |
| x²=2.19, d.f.=1, N.S.    |                |                   |                |
class of the subjects studied. It could be seen that over 50% of the elderly subjects were widowed and about 70% were unemployed and nearly 80% belonged to low middle and lower social class.

Further a detailed history was taken about the families of the elderly subjects studied. The family members living together, the number of children they have, whether the children were living with them or separately, and if so the distance at which the children live, and how often they are visited by them, whether they have siblings and how often they are visited by them, their main source of income, and the help they receive from their children and other relatives, was enquired into.

The family was divided into joint, nuclear and loosely joint on the basis of living and financial arrangement, and other help received.

The traditional three generation family was called joint family and also when the elderly subject was living with his brother sister, or cousins, and when partly or fully financially supported by them—the family was classified as joint family.

When the elderly subject was living with his spouse and unmarried children only, but was being supported or helped by married children or relatives living separately either in the same house, closely or at a distance, the family was called 'loosely joint' or 'extended' family.

When the elderly subject was living with his spouse and unmarried children, and when the subject was living with his spouse only or living alone and not helped by children or other relatives—the family was called 'nuclear' family.

RESULTS

Table-III describes various variables related to family system.

It was found that in the normal group, 47% of the subjects were living in Joint family, 32% of subjects in loosely joint and 21% of subjects in nuclear family and in the neurotic group 34% of subjects were in joint family, 28% in loosely joint and 40% in nuclear family significantly higher percentage of subjects in neurotic group were from nuclear family.

Seventy four were found living with spouse only or living with spouse and children and 17 of them exhibited neurotic symptoms (23%). Eighty seven had lost their spouse and they were living with children or other relatives and 24 of them exhibited neurotic symptoms (28%). It could be seen that those elders who were living alone were more often depressed and anxious. The difference between the groups were not statistically significant.

The number of subjects in the normal and functional groups who had children, and who did not have children, were not significantly different.

| TABLE III—Family of subjects aged over sixty |
|---------------------------------------------|
| Normal | Functional | Organic |
| (N=120) | (N=50) | (N=11) |
| N % | N % | N % |
|---|---|---|
| Family system | | |
| Joint | 56 46.6 | 17 34 | 6 54.5 |
| Loosely joint | 38 31.8 | 19 38 | 2 18.2 |
| Nuclear | 26 21.6 | 20 40 | 3 27.3 |
| x²=8.06, d.f.=2, p<.05 |
| Living Condition | | |
| Living alone | 11 9.2 | 9 18 | .. |
| Living with spouse only | 4 3.3 | 3 6.0 | .. |
| Living with spouse children & others | 48 40.0 | 14 28.0 | 5 45.5 |
| Living with children or others | 57 47.5 | 24 48.0 | 6 54.5 |
| x²=5.54., d.f.=2, N.S. |
| Children | | |
| Yes | 107 89.2 | 46 92.0 | 10 90.0 |
| No | 13 10.8 | 4 8.0 | 1 9.1 |
| x²=0.02, d.f.=1, N.S. |
| Distance of the House of the Children | | |
| Same house | 96 80.0 | 41 82.0 | 10 90.9 |
| 5 minutes distance | 1 0.8 | 2 4.0 | .. |
| 1/2 hour distance | .. | .. | .. |
| 1 hour distance | 2 1.6 | 1 2.0 | .. |
| Over 1 hour distance | .. | 8 6.7 | 2 4.0 | .. |
| No living child | .. | 13 10.8 | 4 8.0 | 1 9.1 |
| x²=0.01, d.f.=1, N.S. |
The distance between the subjects and their children when living separately, is also given in Table III. It was found that most subjects who had children were found living with them. Irrespective of the number of children the subject had, even if one child lived with the subject, it was recorded in the proforma that the subject was living with the child. Sometimes, the subject was living with unmarried children only and married children were living separately. This distinction was taken into consideration only for the family division of joint and nuclear family and not here when we were recording whether the subject was living with the child or not.

Next we enquired how often they were visited by their children. Whether daily, once a week, once a month or once a year. This became meaningless because most of the subjects when they had children were living with at least one child.

Altogether 33 psychosocial variables were studied, and their correlation with psychiatric disorders of old age was determined by means of a Computer. Further, factorial analysis was carried out, and three factors were extracted. Table IV gives the list of variables and their factor loadings.

### TABLE IV—Psycho social factors in subjects aged over sixty factorial analysis

| Variables                  | Factors (N=181) | Correlation with psychiatric illness N=181 |
|----------------------------|-----------------|------------------------------------------|
| 1. Sex                     | 0.30 0.57 0.29  | 0.04                                     |
| 2. Age                     | 0.20 0.29 0.32  | 0.11                                     |
| 3. Civil status            | 0.55 0.43 0.46  | 0.18                                     |
| 4. Occupation              | 0.23 0.45 0.38  | 0.11                                     |
| 5. Education               | 0.31 0.50 0.14  | 0.08                                     |
| 6. Monthly income          | 0.50 0.40 0.30  | 0.20                                     |
| 7. Type of residence           | 0.44 0.39 0.24  | 0.07                                     |
| 8. Living alone            | 0.47 0.52 0.37  | 0.09                                     |
| 9. Residents family        | 0.20 0.32 0.13  | 0.07                                     |
| 10. Family system          | 0.27 0.16 0.49  | 0.07                                     |
| 11. Bereavement            | 0.07 0.19 0.12  | 0.09                                     |
| 12. Difficulty in meeting expenses | 0.35 0.06 0.35  | 0.12                                     |
| 13. Capacity of self care  | 0.40 0.23 0.20  | 0.42                                     |
| 14. Capacity of spouse for self care | 0.46 0.39 0.42  | 0.12                                     |
| 15. Social status          | 0.47 0.37 0.82  | 0.15                                     |
| 16. Respondents' health    | 0.63 0.25 0.16  | 0.37                                     |
| 17. Somatic Disorder       | 0.46 0.26 0.08  | 0.36                                     |
| 18. Sensory disorder       | 0.99 0.21 0.11  | 0.33                                     |
| 19. Emotional Disorder     | 0.55 0.10 0.29  | 0.58                                     |
| 20. Mental deterioration   | 0.24 0.30 0.42  | 0.51                                     |
| 21. Hospital Treatment     | 0.28 0.00 0.07  | 0.09                                     |
| 22. Outpatient treatment   | 0.09 0.29 0.02  | 0.09                                     |
| 23. Deterioration in health| 0.55 0.40 0.08  | 0.46                                     |
| 24. Needing nursing care   | 0.33 0.54 0.26  | 0.39                                     |
| 25. Presence of chronic illness | 0.31 0.29 0.02  | 0.18                                     |
| 26. Respondent's mobility  | 0.46 0.55 0.28  | 0.47                                     |
| 27. Ability to go out      | 0.43 0.44 0.25  | 0.42                                     |
| 28. Feels lonely           | 0.72 0.03 0.10  | 0.40                                     |
| 29. Self pity              | 0.69 0.01 0.15  | 0.39                                     |
| 30. Satisfaction with life | 0.68 0.16 0.23  | 0.49                                     |
| 31. Past mental illness    | 0.02 0.16 0.22  | 0.02                                     |
| 32. Parental loss in childhood | 0.11 0.19 0.10  | 0.11                                     |
| 33. Personality            | 0.24 0.44 0.03  | 0.29                                     |

P>.1=.18  P>.5=.13

Percentage of total variance 17.18 28.67 35.38

Table V gives the list of variables that went to form Factor I, Factor II and Factor III. It could be seen that in Factor I, social economic variables, physical illness variables and emotional attitude variables had high loading and Factor II and Factor III were about family and living conditions.
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TABLE V—Psychosocial factors in psychiatric disorders in subjects aged over sixty factorial analysis

| Factor I (17.2%) | Factor II (8.5%) | Factor II (6.7%) |
|------------------|------------------|------------------|
| Civil Status     | 1. Sex           | 1. Civil Status  |
| 2. Monthly income| 2. Occupation    | 2. Family system |
| 3. Living alone  | 3. Education     | 3. Capacity of spouse for self care. |
| 4. Capacity of spouse for self care. | 4. Living alone | |
| 5. Social Status | 5. Needing nursing care. | |
| 6. Respondent's health | 6. Respondent's mobility | |
| 7. Somatic disorder | 7. Deterioration in health. | |
| 8. Emotional disturbance | 8. | |
| 9. Respondent's mobility. | 9. Respondent's | |
| 10. Feels lonely | 10. | |
| 11. Self pity    | 11. | |
| 12. Dissatisfaction with life. | 12. | |

DISCUSSION

Community surveys of Surya (1964) and Dube (1970) and Verghese et al. (1973), all age group subjects were studied, and hence the number of old age subjects in the sample were necessarily small. The present study was specifically directed to find the prevalence of psychiatric illness in the aged in the community, and the family of elderly subjects and other psychosocial variables contributing to psychiatric disorders in the aged.

That the psychiatric disorders in the aged in our community are infrequent appears to be a myth! In the present study it was found that about 33% of subjects aged over 60 years in the community were found to exhibit manifestations of psychiatric illness. Key et al. (1964) found that 35% of subjects aged over 65 in Newcastle were found to exhibit psychiatric illness.

Nielsen (1963) studying the mental illness in old age in a Danish population found that the prevalence of psychiatric disorders was associated with household composition. There was a significantly low rate for those living with spouse, a high rate for those living with relatives or children and the highest for those living in old age homes.

Aanantharaman (1975) studied the adjustment of old age subjects using a battery of psychological tests. He found that those who were living in joint families married and living with wife and children were better adjusted, men living in nuclear families and men who had lost their spouse were poorly adjusted.

Venkoba Rao and Virudhagirinathan (1972) using Khatri's scale of family jointedness studied the family structure of elderly subjects attending Government Erskine Hospital, Madurai and found no support...
for the hypothesis that 'not at all joint' small family, implying less financial social and psychological support, favours functional illness in the old. Interestingly, they went on to study the preference of old age patients for the type of family, and the reasons for the same, and they found that 80% of those in nuclear family preferred joint family for economic and emotional reasons.

In a recent excellent review article on socio-cultural correlates of psychiatric disorders, in India, Sethi and Manchanda (1978) observed, 'eight out of ten studies have shown a greater vulnerability to psychiatric illness amongst those belonging to a unitary family structure. While joint family set up cannot be assumed to be immune to psychiatric illness, it is their view that the system itself provided several built in safety measures which are usually missing in unitary families.'

In the present study the family structure and family cohesion of old age subjects was intensively studied, and it was noted that higher percentage of old age subjects living in nuclear family and living alone were psychiatrically ill. Elderly individuals were often widowed and unemployed, physically weak and ill, and family cohesion and support gave them help and relieved their emotional distress.

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