

DEPRESSION AND SUICIDE BEHAVIOUR IN THE AGED

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The increase in life expectancy has been a spectacular achievement of our century but this is not without new challenges. Those above the age of sixty contribute to 7 per cent of the total population of India and number about 42 million (1981 census), a figure equal to the population of a country like Spain. Their number is expected to reach 51 million in 1991. This calls for measures to tackle the problem which will definitely be one of the significant branches of Geriatrics. Depressive illness is a major area of psychopathology in the geropsychiatric territory. Depression ruins the lives of many old folks and kills a few either through suicide or possibly through 'turning their faces to the wall' (Pitts, 1980). This presentation is based on the material from the geropsychiatric and suicide prevention clinics, Community mental health Centre of the Institute of Psychiatry, Madurai Medical College and Government Rajaji Hospital and the Geropsychiatric survey in a semi urban area near Madurai by us (Venkoba Rao and Madhavan, 1982). The material has also been drawn from the Government of India Statistics on Suicide from the Department of Forensic Sciences, Madurai Medical College.

FREQUENCY OF DEPRESSION

The occurrence of affective disorders in the elderly has been found to vary from 21% to 39% among the patients attending the Geropsychiatric clinic (Venkoba Rao et al., 1972; Venkoba Rao, 1981). Depressive illness formed

13% to 22.2% among them. The mental morbidity among those aged 60 and above in India has been estimated at 89 per 1000 (Venkoba Rao and Madhavan, 1982). Projecting this figure to the national level, there are around 3.65 million mentally ill in this age group in the country. In a semi-urban community near Madurai depressive illness formed 67% of total psychiatric morbidity (Venkoba Rao and Madhavan, 1982). The prevalence of depression was calculated by these authors at 60 per 1000 of the geriatric population. A recent statistical analysis from the Geropsychiatric clinic indicates the figure of 43% (Venkoba Rao unpublished). Its incidence in the community mental health centre was 85%. A lower incidence in the clinic than in the field was obvious. Table I offers the prevalence rate of depressive illness in community populations from different sources, adapted from Blazer (1982).

Depression was the commonest diagnosis in the random sampling survey carried out by Ramachandran and Sarada Menon (1980) near Madras. Their prevalence rate was 241 per 1000. Their figure included both endogenous and neurotic depression. Out of 133 cases of depressions, they noted 12 to be endogenous and 86 neurotic type. The depressive illness in the community is invisible due to factors like community tolerance, mistaking the withdrawal features of the old person to the process of ageing itself, failure to perceive the depression as an illness by the family members and the so-

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TABLE 1. *Prevalence of depressive illness*

Author	Population	% rate	Age range
Dovenmuehle <i>et al.</i> (1960)	Population sample	34	65
Essen-Moller <i>et al.</i> (1961)	Whole Population	2	60
Kay <i>et al.</i> (1964)	Population Sample	7	65
Parsons (1965)	—do—	0.9	65
Ballerup (1975)	—do—		70
M. D. P.		0.5	
Endogenous depression		0.5	
Depressive illness		1.0	
Weissman and Myers (1978)			66
Major depression		5.4	
Minor depression		2.7	
Ramachandran and Sarada Menon (1980)	Random sample		50
Depressive neurosis		24.0	
Endogenous depression		3.0	
Venkoba Rao and Madhavan (1982)	Whole Population		60
Primary depression		6.0	

ciety. Wig *et al.* (1981) drew attention to the failure of perception of depressive illness by the rural population. The possibility that features of rural depression may be different from the standard description of the illness and whether this might be the cause for the rural patients remaining undetected has been ruled out by the observation of Nandi *et al.* (1975) who noted that the symptomatology of rural depressive did not differ from the urban depressive. The frequency of affective disorders and OBS in the author's Geropsychiatric clinic and the community offers a striking contrast.

The cases of organic brain syndrome, by virtue of their symptoms of memory disturbance, wandering, incontinence, nocturnal delirium may necessitate their being shifted early to the hospital. Similarly cases of mania too are hospitalised. None of them were seen in community survey. Table II offers the difference in frequency figures of these diagnostic categories in the Geropsychiatric clinic and in our field study (Venkoba Rao and Madhavan, 1982).

TABLE II

Diagnosis	Gero-psychiatric	Field study
Organic Brain Syndromes	34.39%	9.8%
Affective disorders	42.78% (includes mania)	67.0% (No mania)

The risk of mental illness increases with advancing age among the elderly is indicated in the Table III (Venkoba Rao and Madhavan, 1982). This applies for depression too.

TABLE III. *Prevalence of Psychiatric Illness at Higher age Group (per 1000 Population)*

Age Group	All Illnesses	Depression
All those over 60	89	60
60—70	71.5	50
70—80	124	80
80 and above	155	88

CLINICAL FEATURES

Age and Sex distribution

In a series of seventy cases of endogenous affective disorders in persons aged over sixty, Venkoba Rao (1981) found unipolar depression in five, bipolar depression in six, unipolar mania in seven,

first episode depression in thirty cases. Twelve cases were of secondary depression. The view that unipolar mania and bipolars rarely have their inception in the elderly did not find support in the author's findings. There is a male dominance in the depressive illness of the old age. This is explainable on the fact that the males retire from their jobs on superannuation and leisure is forced upon them. This results in loss of income and self-esteem which predispose to depression. On the other hand, the women are continuously engaged in the household activities and in a sense there is no retirement for them. They withdraw owing to extreme debility of illness. Their time is well filled and intrafamily attachments continue. They are less susceptible to depressive illness compared to males or even to working women. The sex distribution of depression in the series of Venkoba Rao et al (1972) was M:F: 5:1 and that of Venkoba Rao's (1981) 3:1.

AGE AND SYMPTOMS

The clinical features in the aged generally conform to the description in the standard texts of psychiatry. Venkoba Rao et al (1972) however observed an increase in the agitation and restlessness, rather than retardation, rarity of ideas of sin and guilt, more somatic and paranoid symptomatology. There has been a debate whether the symptoms of depression in the elderly are same as those occurring in the younger age group or whether they differ.

It has been pointed out that there is in general a repetition or replication of clinical features in recurrent depression (Post, 1968). Tait et al (1957) using the appendix from Aubrey Lewis 'Monograph on Depression' compared the symptomatology of depression in patients below the age of 40 with those above 40. To a statistically insignifi-

cant extent agitation alone was commoner in elder and retardation in younger patients. Self-reproach was equally distributed. Surprisingly hypochondriasis was commoner in the younger depressives in their series. Nevertheless presence of hypochondriasis has been found to be around 63.6% by De Alarcon (1964) in the elderly.

In the senior author's series (Venkoba Rao, 1981) a comparison was made of the symptomatology of 45 patients whose depression started first after the age of 60 (Group A) with the symptomatology of 45 younger depressive aged below 40 (Group B). The Group B subjects were unipolar depressives with an average of 3.13 episodes. Amongst those in Group-A, 34 had only one episode while others had 2 or more episodes the average being 1.38 episodes. In two thirds of them a period of more than 3 years has elapsed since the onset of the episode which reduces the chances of a manic episode setting in.

Use was made of the 40 items from W. H. O. standardised assessment schedule for depressed patients.

Joylessness, hopelessness, anxiety or tension, aggression, lack of energy, disruption of social functioning, desire to be left alone, retardation of thoughts, indecisiveness, lack of self-confidence, loss of interests, lack of ability to concentrate, lack of appetite, change of body weight, decrease of libido, change of perception of time, ideas of insufficiency, diurnal variation in moods, hypochondriasis, psychomotor retardation, subjective loss of memory, all these were more in those depressives in whom the illness started below 40 years. No significant difference was noticed in respect of other symptoms like sadness or depressed mood, irritability, sleep disturbances, somatic symptomatology, suicidal ideas, feeling of guilt and self-reproach, ideas of self-accusations, persecution and other de-

lusions and disorder of perception, physical disability and infirmity. The ideas of guilt and self-reproach were less in both the groups while ideas of suicide were of same high frequency in them. The perception of time sense was distorted more amongst the youngsters than in elderly. Most interesting was the incidence of hypochondriacal symptoms which contrary to expectations were more predominant in the youngsters than the older ones. The common symptoms extracted from the schedule in the elderly depressives were in the order of frequency of occurrence; sadness, depressed mood (93.3%), somatic symptoms and signs (71.1%), suicidal ideas (66.6%), lack of energy (66.6%), anxiety or tension (60%), inability to fall asleep (45.7%), early awakening (53.3%), hopelessness (53.3%), irritability (51.1%) and joylessness and inability to enjoy (51.1%).

It was hypothesised that differential distribution of symptoms in the two samples is attributable to the age factor though ageing by itself implies several variables. The older individual has less to look forward to with a shrinking milieu. His own anticipations as well as the expectation of others regarding his active functioning are likely to be limited. On the other hand, younger individual has years before him and has a wider milieu. His aspirations and anticipations are higher and he is expected to play an active role in the different spheres of life. It is of interest to note that the symptoms which are most marked in these younger depressives pertain to these two aspects of activity and social functioning. The symptoms of disruption of social functioning, psychomotor retardation, retardation of thinking, indecisiveness, subjective loss of memory were far more frequent in youngsters, while more basic symptoms of depressions like sadness, depressed mood, suicidal ideas and sleep disturbances

are of more or less equal frequency in both groups. No significant difference in somatic symptomatology was found except for anorexia, loss of weight to occur more often in younger depressives. The more or less acutely setting in of various somatic dysfunctions, in the prime of life may be responsible for the increased frequency of hypochondriacal pre-occupations in youngsters. It is natural that older people rarely complain of decreased libido, while younger depressives often do. The distortion of perception of time which is reported more frequently by younger patients, also could be a function of age, since they should be more oriented towards future and set a higher premium on the value of time.

Thus depressive symptomatology in elderly appear more bland while variety marks the younger depressives. It is likely that whatever differences exist between the symptomatology is due to the age itself. This does not exclude other contributors like genetic factors which need a detailed analysis. A longitudinal study of the depressive symptomatology at different ages in the same individual may clarify the role of ageing.

The author's data in this regard agree with the comment of Post (1972). "Every depressive attack is an individual affair. It is not infrequently characterised by different symptom complexes at different times during the life of the same person. On each separate occasion, the illness should be regarded as an individual affair multifactorily compounded."

Negative feelings towards self observed by Beck (1967) in nearly 26% of severely depressive individuals were found to be not common in the elderly by Winokur et al. (1980). Goldfarb (1974) noted in the elderly often a sense of emptiness which is associated with suicide impulse. Low self-esteem was uncom-

mon and it was replaced by a sense of pessimism (Goldfarb, 1974). Guilt has also been found to be infrequent in the elderly by Blazer & Abbey (1980) and Winokur et al (1980). Among other important symptoms in the elderly, depressed, dejected mood was not found to be common as much as in the youngsters (Salzman and Shader, 1978; Goldfarb, 1974). Beck (1967) listed a decreased life satisfaction as the most common symptom. This may occur as normal human response to an adverse social stimulus (Thomas, 1980) and hence not of much significance with depression.

UNIPOLAR AND BIPOLAR DEPRESSION

In the author's series of 74 cases of depression 55 were primary and 12 secondary types (Venkoba Rao unpublished). Depression (N=30) occurred thrice more often than mania (N=10) for the first time after 60 years. Five out of six bipolars started after the age of sixty and that 75% of unipolar mania started above sixty years. The occurrence of unipolar mania and bipolar for the first time after sixty is at variance with the experience of Perris (1982). Perris admits in this collection, there were no more than seventeen cases of unipolar mania among 1539 cases. Secondary depression were due to cerebral vascular diseases, cancer, dementia, Parkinsonism.

EPISODE OF DEPRESSION AND MANIA

Taking episodes of both depression and mania, fifty three patients had a total of 103 episodes—67 of depression, 36 mania; a ratio of approximately 2:1. Of 67 depressive attacks 20 occurred prior to 60th year and 47 after this age. Of 36 manic episodes 28 occurred after 60th year while 8 occurred before 60. The depressive episodes far outnumbered the manic.

TABLE IV

	Male (N=55)	Female (N=19)	Total (N=74)
<i>A. Primary Depression</i>			
<i>First episode depression</i> No previous depression or mania.	19	11	30
<i>Unipolar depression</i>	6	3	9
<i>First episode before</i> 60 yrs.	3	2	5
<i>First episode after</i> 60 yrs.	3	1	4
<i>First episode mania</i>	10	0	10
No previous mania or depression			
<i>Unipolar mania</i>	6	1	7
<i>First episode before</i> 60 yrs.	3	1	4
<i>First episode after</i> 60 yrs.	3	0	3
<i>Bipolar depression</i>	6	0	6
<i>Onset before 60 yrs</i>	1	0	1
<i>Onset after 60 yrs</i>	5	0	5
<i>B. Secondary Depression</i>			
	8	4	12

TABLE V. *Depression and Mania Episodes*

Total Patients		N=53	
Depression and Manic Episodes		=103	
		Depression=67	Manic=36
Depression	Before	60	= 20
	After	60	= 47
Mania	Before	60	= 8
	After	60	= 28
Depression : Mania		2	: 1

It is not uncommon for manic episodes to occur after the age of 60. Unipolar mania occurred in 7 out of 58 cases (12%) after the 60th year. Among single episodes (first episodes) depres

sion (30) outnumbered manic (10) after 60th year.

OUTCOME DATA :

The outcome study in which 73 out of 150 consecutive cases were so far followed up (the follow up is still going on), revealed the following findings. In general complete recovery and partial recovery occurred in 58% and 24 % of affective disorders, with 18% registering relapses. On the other hand in the OBS group there was a mortality rate of 41% and an unchanged or a worsening course in 18% each. There was 23% complete recovery in this group, which was however noticeable in acute confusional states. The contrast in the outcome of affective disorder group and the dementia group confirms the observation of Roth and others in their classic New Castle Study.

SUICIDAL ATTEMPTS AND SUICIDE

No discussion on depression is complete without a note on suicide. The literature on suicide in the elderly in Indian subcontinent is sparse. The data extracted from the statistics of the Ministry of Home affairs, Government of India reveal a steady increase in the number of suicides during the quinquennium 1973-1977 by those aged fifty and above (Table VI). No data are available for age group above sixty.

TABLE VI. *Percentage of suicide among the total suicides in India in persons aged above fifty*

Year	Percentage
1973	8.6
1974	8.7
1975	11.8
1976	12.1
1977	11.6

The increase during the period of five years has been nearly one and one-third times. The breakdown for the age groups above fifty is not available.

In the United States, suicide is predominantly a phenomenon of the elderly whites. However, the suicide rates have been increasing for non-white population in recent years. An investigation of 1976 suicide statistics among the minority elderly revealed that suicide rates are also highest among the old for Chinese, Japanese, and Phillipino-Americans. Among the Blacks and Native Americans, suicide rates are very low for the aged (McIntosh and Santos, 1981).

In a study of suicide in those 55 years and above in the Veterans hospital system, it was found that the rate was lowest in comparison to all other age groups. This was in contrast to the observation that an elderly committed suicide six to eight times more frequently than the younger individual (Farberow and Mackinnon, 1975). This low rate was explainable to the fact that the chronic elderly engaged in Indirect Self-Destructive Behaviour more often than in overt suicidal act. These behaviours were suicide substitutes. The indirect self destructive behaviour has been discussed by Farberow (1977) (See the chapter on the topic). In the West, twenty-five percent of completed suicides are contributed to by the elderly. In India, the trend is that the figures are at present half of the Western rate.

During the five year period 1978-1982 in the author's suicide prevention clinic, there were 47 cases of suicide attempters aged over sixty amongst the total 6312 registered cases of all ages. Of these 47, seven proved fatal. The ratio of the completed suicide to the attempted suicide is 1:7 in the elderly which is much higher than the ratio of 1:15 at the lower age groups early reported by him (Venkoba Rao, 1968). This means that

more attempts end fatally in the old people. All these cases were first seen in the detoxication or the intensive care unit and none were in contact with a clinic or a social agency. This is in contrast with a series of forty one cases of endogenous depression referred to already among whom 50% expressed suicidal ideas. None of them except two had made a prior suicide attempt. In the follow up period extending for a year, no suicide or attempt occurred in them. On the other hand, the two suicides occurred in nondepressive cases. This highlights the point that the potentially suicidal depressed elderly are unlikely to be receiving psychiatric care and their first attempt is likely to be fatal. Parasuicides are uncommon in the elderly. The suicide ideation in the elderly depressed is as frequent as in the younger age group as indicated earlier. They are common both in unipolars and bipolars. Shuleman (1978) points out a close relationship between suicide, parasuicide and depression in the old people. Sendbeuler et al (1977) found a low incidence of attempted suicide in old people in Ottawa. Out of 722 suicide autopsies in the period 1979-1982 carried out in the Department of Forensic Medicine, Madurai Medical College, 31 were aged above sixty (6%) (Table VII).

TABLE VII. *Suicide Behaviour in the Elderly by Suicide Autopsies Madurai*

Year	Total All Ages (N-722)	Male (N-24)	Elderly Female (N-7)	Total (N-31)
1979	157	6	1	7
1980	163	8	0	8
1981	169	4	3	7
1982	243	6	3	9

SOCIAL FACTORS

In the Western literature on suicide and depression importance is attached to loneliness and the social isolation, the criterion being living alone. According to our community survey findings while 54.8% of the "normal" persons were socially well integrated, only 26.2% of the psychiatrically morbid fell in this group. Conversely 29.5% among the psychiatrically morbid and 8.8% among the 'normal' were not integrated.

TABLE VIII. *Social integration in the Psychiatrically ill & the normal*

Social integration	Normal	Psychiatric	X ²	'p'
Well	54.8	26.2	16.97	.001
Moderate	35.2	40.9	0.69	NS
Not integrated	8.8	29.5	13.8	.001
Isolated	1.1	3.2	1.04	NS

We have observed that social isolation does not affect the elderly in the Indian setting (Venkoba Rao et al., 1972). Our present hypothesis is that it is lack of social integration rather than social isolation that is of importance. Living in the family, either joint or extended does not guarantee social integration where the old ones are like "lonely islands". On the other hand living alone does not signify social isolation. Measures to enhance integration like guidance, counselling to the family members, financial support to the elderly, advising placements in the accepting family, visits by social worker are called for. The degree of integration was a global assessment arrived at by the individual's integration within the family into the Society and his own personal activities (ICMR Schedule). The recent Vienna Meet declared that the family care was the best for the elderly.

In our study 12% of the healthy and 16% of the psychiatrically morbid were living alone whereas nearly 50% were either in the joint or extended family and the remaining 30% in the nuclear type. Thus family setting continues to be available for the elderly and the advantage may be taken of this to augment the care to the elderly.

It is to be made clear that a change in the pattern of living is currently occurring in the country with a gradual dissolution of the classical joint family. The elderly person though 'de-economised' finds some support at present in a family. This may not be so some decades later. That it has already been taking place is indicated by the rising figures of suicides in those above fifty in the country and a high prevalence of depressive illness in the community.

To conclude, Rabindranath Tagore's Verse sums up the essence of the philosophy and attitude towards ageing: "Death belongs to life as much as birth does; the walk is in the raising of the foot as in laying of it down".

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