

GERIATRIC PATIENTS ATTENDING TERTIARY CARE PSYCHIATRIC HOSPITAL

YVONNE DA SILVA PEREIRA, AJOY ESTIBEIRO, RAJESH DHUME & JOHN FERNANDES

ABSTRACT

This retrospective study aimed to explore the Socio-demographic characteristics and clinical profile of patients aged 60 years and above, attending psychiatric services for the first time at the Institute of Psychiatry and Human Behaviour, Goa during 1993-1998. Hospital case files of six hundred and ninety-eight patients formed the study sample. Preliminary analysis revealed that 70% of the sample was between 60-69 years. Mean age was 65.8 years (Sd \pm 6.11). Sex ratio male to female was 38:62. 59% came from extended families. The commonest psychiatric diagnosis was mood (affective) disorders seen in 43% of the sample, of which more than half had depression. Associated physical illnesses were seen in 68% of the sample. The differential occurrences of various psychiatric diagnostic categories as well as associated physical illnesses were significantly associated with the sex of the patients.

Key Words: *Mental illnesses in the elderly, geriatric psychiatry*

The average life span in many parts of the world has increased over the past century beginning with new challenges. In India, those above the age of sixty form 6.4% of the country's population. This figure is likely to increase to 15% by 2025 A.D. The aged are saddled with burden, devitalized by losses and close to death. In addition the ageing frame is often beset with sensory deficits and somatic illnesses. About 15-20% of the elderly have mental health problems and this figure is likely to escalate in the near future. The psychiatric services and the literature on psycho-geriatrics have not kept pace with the increase in the longevity and the psychiatric needs. This study is undertaken to explore the socio-demographic characteristics and clinical profile of geriatric patients attending the Out Patient Department for the first time at the institute of Psychiatry and Human Behaviour (hereafter called

IPHB), a tertiary care psychiatric hospital in Goa.

MATERIAL AND METHOD

The study was conducted at the IPHB. All new cases that are registered are first examined by the junior doctors and then discussed with the consultants. The hospital case files contain notes on history, clinical evaluation, physical examination, investigation reports and follow up records. Hospital case files of patients aged 60 years and above, who had attended the Out Patient Department for the first time between 1993-1998 were screened and the data was extracted on a proforma developed for the purpose of this study. This contained sociodemographic variables, diagnosis according to ICD-10 (World Health Organization, 1992), associated physical illnesses and treatment given. The data was

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analysed and chi-square test of significance was used to find the differential occurrence of psychiatric diagnostic categories, associated physical illnesses and their correction with the sex of the patient.

RESULTS

During the study period 13,877 patients were registered for the psychiatric evaluation. Seven hundred and fifty-five patients were 60 years and above forming 5.4% of the total registered cases. Hospital case files of fifty-seven patients did not provide adequate information; hence case files of six hundred and ninety-eight patients formed the sample of this study.

The socio-demographic characteristics are summarized in Table 1. Majority of the subjects i.e. 491(70.4%) were between 60-69 years. The mean age was 65.8 years with a standard deviation of 6.11 years. It was seen that there was preponderance of females in all the age groups. The M:F age group wise ratio being 1:1.7, 1:1.5 and 1:1.1. About 588 (84.24%) of the subjects hailed from rural areas, whereas only 110(15.8%) came from semi-urban and urban localities. 413(59.2%) were reported to be from extended families, 250(35.8%) were from either nuclear or joint families and only 33(4.7%) were living alone. Three fourth of the patients, 530(75.9%) were accompanied by family members.

Marital status revealed that all patients except 47 were married. 223 (32%) patients had lost their spouses, of these 18(2.6%) were widowers and 205(29.4%) were widows. Educational status showed that 433(62%) were illiterate, while 256(36.7%) had primary or secondary education and only 3(0.43%) were graduates. Occupational status revealed that majority 425 (60.9%) were housewives, 142(20.3%) were retired, 24(3.4%) were unemployed and the rest were engaged in some occupation. Family history of mental illness was present in only 79(11.3%) of the subject.

Table 2 shows the diagnostic break up. The most major diagnostic group was mood (affective) disorders. It comprised the great bulk of the total

TABLE 1
SOCIODEMOGRAPHIC CHARACTERISTICS OF
SAMPLE (N=698)

Characteristics	N	Percentage
<u>Age (in yrs.)</u>		
60-69	491	70.4
70-79	184	26.4
80-89	21	3
90 & Over	2	0.3
<u>Gender</u>		
Males	267	38.3
Females	431	61.7
<u>Residence</u>		
Rural	588	84.2
Semi-urban	48	6.9
Urban	62	8.9
<u>Family Type</u>		
Nuclear	120	17.2
Extended	413	59.2
Joint	130	18.6
Living alone	33	4.7
Old age home	2	0.3
<u>Accompanying person</u>		
Family member	530	75.9
Self	146	20.9
Neighbour	22	3.2
<u>Marital status</u>		
Married	428	61.3
Widow	205	29.4
Widower	18	2.6
Single	40	5.7
Others (separated or divorced)	7	1.0
<u>Literacy</u>		
Illiterate	433	62.0
Primary	206	29.5
Secondary	56	8.0
Graduate	3	0.4
<u>Occupational status</u>		
House wife	425	60.9
Retired	142	20.3
Agricultural labourers	46	6.6
Agriculturists	27	3.9
Labourers	26	3.7
Business	8	1.1
Unemployed	24	3.4
<u>Family History</u>		
Absent	619	88.7
Present	79	11.3

psychiatric disorders forming 305 (43.7%). The categories were manic episode, depressive episode, bipolar affective disorder current episode mania, depression, mixed and dysthymia. Of these depression alone (excluding dysthymia) contributed to 178(58.4%) of the total mood

(affective) disorders and it was found to occur more in females. Other major groups were organic mental disorders 110(15.8%) and schizophrenia 85(12.2%) . 39(5.6%) of the subjects from the former diagnostic group were labelled as having dementia.

TABLE 2
PSYCHIATRIC DIAGNOSTIC BREAK UP OF SAMPLE
(N=698)

Diagnosis	Sex		Total	Percentage
	Male	Female		
Mood (affective) disorders	93	212	305	43.7
Organic mental disorder	56	54	110	15.8
Schizophrenia	19	66	85	12.2
Delusional disorder	16	25	41	5.3
Acute transient psychotic disorder	30	26	56	8.0
Neurotic, stress related & somatoform disorder	19	42	61	8.5
Mental & behavioural disorders due to alcohol	30	--	30	4.3
Others (sleep disorders)	4	6	10	1.4

The minor diagnostic groups were neurotic stress related & somatoform disorders which formed 61(8.7%). In this category, the commonest clinical condition was mixed anxiety and depressive disorder, contributing to 21(42%). Acute & transient psychotic disorders were seen in 56(8%) and delusional disorders in 41(5.3%).

Mental and behavioural disorders due to alcohol were the only category seen exclusively in males. There was a significant difference in the sex wise distribution of the various diagnostic categories ($X^2=46.155, d.f.=7, p<0.005$).

Table 3 offers the associated physical illnesses. They were present in 479(68%) of the sample. Common physical illnesses were essential hypertension, diabetes mellitus, chronic obstructive pulmonary disease and contract. 20%

had multiple physical illnesses.

TABLE 3
ASSOCIATED PHYSICAL ILLNESSES OF SAMPLE
(N=479)

Diagnosis	Sex		Total	Percentage
	Male	Female		
Essential hypertension	52	150	202	28.9
Diabetes mellitus	54	80	134	19.2
COOPD	25	32	57	8.2
Cataract	18	27	45	6.4
Sensory impairment	8	7	15	2.1
Ischaemic heart disease	6	4	10	1.4
Arthritis	4	5	9	1.3
Peripheral neuritis	5	2	7	1.0

There was a significant difference in the sex wise distribution of the physical illnesses ($X^2=22.577, d.f.=7, p<0.005$).

DISCUSSION

This retrospective case file based study undertook to explore the socio-demographic variables and the type of mental illnesses prevalent in the elderly in a hospital setting. Since 92.3% of the case files provided us with the necessary information for the study, it indicates that the data was reliable.

The present study has brought out the patients aged 60 and above formed 5.4% of the total attendance at a tertiary care psychiatric hospital. This goes in accordance with the findings reported by Venkoba Rao *et al.* (1972) i.e. 5% from a general hospital survey of patients aged fifty and over with first (onset) of mental illness. Bhogale *et al.* (1993) reported 6.6% and Prasad *et al.* (1996) reported 4.17% in hospital based studies. However, community based studies have shown higher prevalence of psychiatric disorders in the elderly e.g. Ramchandran *et al.*, (1982) reported 35% from a survey conducted in a suburban area near Madras. Venkoba Rao and Madhavan (1982) reported 8.9% from the Thiruppuvanam survey. Community based studies probably do not have

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to deal with various factors that influence treatment seeking behaviour.

Majority of the subjects 491(70.7%) were in the age group 60-69. This is in accordance with the studies of Venkoba Rao et al.(1972), Bhogale et al.(1993) and Prasad et al.(1996).

In our study the male to female ratio was 1:1.6. This finding is at variance with the other studies, which have reported a male preponderance. By virtue of their longevity more females may have reported for treatment. Further the males might have sought psychiatric treatment earlier and were stabilized before reaching old age.

The high percentage of patients hailing from rural areas could be explained on the basis, that these patients probably presented to the psychiatric services after trying out alternate treatment modalities. Further factors like under recognition of less serious mental illnesses in the rural setting, inaccessibility and indigence might have contributed to the high percentage availing tertiary care facilities later in life.

The percentage of illiteracy, which was found to be 62.3% is a surprising finding in a state that ranks high in literacy in India. This can be explained on the basis that 84.2% of the study sample hailed from rural areas. The childhood years of these patients were in the Pre-liberation era, when the educational facilities were meagre in the villages. Further, it should be noted that the people from the adjoining districts of Karnataka and Maharashtra are availing of the psychiatric services in Goa.

More than three quarters of the patients did not have family history of mental illness, this signifies that hereditary factors are relatively unimportant in the elderly mentally ill.

Mood (affective) disorders were seen in a sizeable number of the subjects. Several authors have found the highest incidence of affective disorders to occur in older age groups. Silverman (1968) reported maximum inception rates for both sexes between ages 45 and 64 years, while Pederson et al.(1972) found the maximum rate to occur somewhat later between ages 50 and 70

years. A sex difference in ages at onset (determined by a study of first admission data) was reported by Spicer et al.(1973), who found that the maximum rates of psychiatric depression were between 60 and 65 years in men and between 50 and 65 years in women. John et al.(1985) reported a relatively steady increase in this rate of first onset affective disorders with increasing age. Disruption and losses of important relationships become more frequent with increasing age, Paykel(1982). Yassa et al.(1988) and Rosen et al.(1990) reported that mania can also present in elderly patients.

More females were observed to have depression in this study. Factors like widowhood, & having associated physical illnesses, could have contributed to this clinical condition. Some studies have shown that women are more likely to be depressed than men e.g. Pollitt (1977), Weissman & Klerman (1977) and Krause (1986).

Subjects with organic mental disorders in this were less as compared to 39.1% reported by Venkoba Rao et al.(1972) and 30% by Draper (1994). Harrison et al.(1998) reported 48% and Snowdon(1991) reported 30% from inpatient population. This may be because some of the patients with organic mental disorders are being managed at the general hospital set up (i.e. Goa Medical College), with the doctors from IPHB, attending to them as part of consultation liaison.

Frequency of schizophrenia in our study compares well with that of Larco & Jeste (1997). There were more female schizophrenics as compared to males, a finding in keeping with that of Grossberg et al.(1995). The risk for developing psychosis especially schizophrenia increases in postmenopausal women. Certain biological protective factors against functional psychosis, such as lowering of estrogen occur in the postmenopausal age, Hafner et al.(1991).

In the present study three fourths of the subjects were living either in extended or joint families, suggesting that family setting continues to be available for the elderly. This is reflected in the proportion of the elderly seeking tertiary care support. The family support and the attitude of

the family members were not measured in this study. However, considering the fact that about three fourths of the patients were accompanied by the family members it signifies that families are supportive.

In conclusion, we report that mood (affective) disorders formed a large group of mental disorders in the geriatric age group of which more than half had depression. Since the data is from a hospital situation, the findings cannot be extended to the community. These at best reflect the pattern of hospital utilization, which is motivated by a variety of factors. Hence the findings need to be confirmed by community based studies.

However, it is important to consider the service implications of our findings. The increasing numbers of the elderly people in the population is of course well documented, as is the challenge this presents to medical services. It has been demonstrated that elderly depressives spend significantly longer as inpatients than do their younger counterparts. The current and worsening shortage of hospital beds for the elderly may thus be further exacerbated if mood (affective) disorders are to become more prevalent like dementia as the age structure of the population changes.

REFERENCES

- Bhogale, G.S. & Sudarshan, C.Y. (1993)** Geriatric patients attending general hospital psychiatric clinic. *Indian Journal of Psychiatry*, 31(4), 203-205.
- Draper, B. (1994)** The elderly admitted to a general hospital psychiatry ward. *Australian and New Zealand Journal of Psychiatry*, 28, 228-297.
- Grossberg, G.T. & Manepalli, J. (1995)** The older patient with psychotic symptoms. *Psychiatr. Serv.*, 46, 55-59.
- Hafner, H., Behrens, S., De Vry, J. & Mrazek, W.F. (1991)** An animal model for the effect of oestradiol on dopamine mediated behaviour. Implications for sex differences in schizophrenia. *Psychiatric Research*, 38, 125-134.
- Harrison, A.W., Kernutt, G.J. & Piperoglou, M.V. (1998)** A survey of patients in a regional geriatric psychiatry inpatient unit. *Australian and New Zealand Journal of Psychiatry*, 22, 142-147.
- John, M. Eagles & Lawrence, J. Whaley (1985)** Ageing and affective disorders: The age at first onset of affective disorders in Scotland 1969-1978. *British Journal of Psychiatry*, 147, 180-187.
- Krause, N. (1986)** Stress and sex differences in depressive symptoms among older adults. *Journal of Gerontology*, 41, 727-731.
- Larco, J.B. & Jeste, D.V. (1997)** Geriatric Psychosis. *Psychiatry*, 68, 247-260.
- Paykel, E.S. (1982)** Life events and early environment. In Handbook of affective disorders (Ed. E.S. Paykel). Edinburgh: Churchill Livingstone.
- Pederson, A.M., Barry, D.J. & Babigan, H.M. (1972)** Epidemiological considerations of psychotic depression. *Archives of General Psychiatry*, 27, 193-197.
- Pollitt, J. (1977)** Sex difference and the mind. Proceedings of the Royal Society of Medicine, 70, 145-148.
- Prasad, K.M.R., Sreenivas, P.K.N., Ashok, M.V. & Bagachi, D. (1996)** Psychogeriatric patients - a sociodemographic and clinical profile. *Indian Journal of Psychiatry*, 38(3), 178-181.
- Ramachandran, V., Sharada Menon, M. & Arunagiri, S. (1982)** Physical disabilities in late onset depression in the community. *Indian Journal of Psychiatry*, 24(3), 274-279.
- Rosen, J., Bohon, S. & Gershon, S. (1990)**

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- Antipsychotics in the elderly. *Acta Psychiatr. Scand. Suppl.*, 358, 170-175.
- Silverman, C.(1968)** The epidemiology of depression, Baltimore: Johns Hopkins Press.
- Snowdon, J.(1991)** Bed requirement for an area psychogeriatric service. *Australian and New Zealand Journal of Psychiatry*, 25, 56-62.
- Spicer, C.C., Hare, E.H. & Slater, E.(1973)** Neurotic and psychotic forms of depressive illness, evidence from age incidence in a national sample. *British Journal of Psychiatry*, 123, 535-541.
- Venkoba Rao, A., Viruthagirinathan, M. & Malathi, R.(1972)** Mental illness in patients aged fifty and over. *Indian Journal of Psychiatry*, 14, 419.
- Venkoba Rao, A. & Madhavan, T.(1982)** Geropsychiatric morbidity survey in a semiurban population near Madurai. *Indian Journal of Psychiatry*, 24, 258-263.
- Weissman, M.M. & Klerman, G.L.(1977)** Sex difference and the epidemiology of depression. *Archives of General Psychiatry*, 34, 99-111.
- World Health Organisation (1992)** The ICD-10 classification of mental and behavioural disorders: Oxford University Press.
- Yassa, R., Nair, N.P. & Iskander, H. (1988)** Late onset bipolar disorder. *Psychiatric Clin North Am.*, 11, 117-131.

YVONNE DA SILVA PEREIRA *, M.D., Lecturer, AJOY ESTIBEIRO, M.D., Senior Resident, RAJESH DHUME, M.D., Senior Resident, JOHN FERNANDES, M.D, Professor, Institute of Psychiatry and Human Behaviour, Opp. Holy Cross Shrine Bambolim, Goa-403202.

* Correspondence