

Psychiatric Co-morbidities in Patients Attending Geriatric Clinic at a Tertiary Care Hospital

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Abstract

Background: Relationship between somatic and psychiatric disorder is closer in old age than in earlier part of the life. From a research perspective, scope of geriatric psychiatry should be broadened to go beyond dementia and depression. The elderly have anxiety disorders, schizophrenia, alcohol and other substances dependence, personality disorders etc. The present study was undertaken to identify various sociodemographic determinants which are responsible for higher prevalence of psychiatric problems in the old age.

Method: Patients, age 60 years and above, registered at geriatric clinic were randomly selected. All patients were clinically assessed and diagnosis was made according to ICD-10 guidelines. Statistical analysis of relationship with psychiatric comorbidity to sociodemographic and psychosocial variables was done.

Result: Twenty nine percent of the elderly patients (116 of 400) were having one or other psychiatric problems. Depressive illnesses were the commonest being present in 72 patients (18%). Past history of psychiatric illness was recorded in 44% (n=32) of depressed patients. Hypertension was more commonly associated with depression (n=68) than any other chronic illness. Twenty patients (5%), all above 70 years of age, had cognitive impairment.

Conclusion: A large number of people above 60 years of age have psychiatric problems. The situation is further complicated by presence of one or more physical illnesses producing stress on aged people.

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Introduction

In old age, there are special problems, which are different from those of younger persons. Isolation from society and feeling of loneliness and hopelessness are the important agonizing problems of the old age. Aged persons become increasingly introspective and reflective, attuned to what is going on inside them. Many think in terms of "time left to live" rather than "time lived". Also the relationship between somatic and psychiatric disorder is closer in old age than in earlier part of the life span. Moreover, conflicts are likely to arise when the sick and tired mind as well as body can not cope with psychological, emotional and physical stress. Lack of social interaction caused by loss of physical capabilities (e.g. mobility, hearing, sight, mental functioning, intelligence, and memory) and by retirement from work is likely to reinforce these feeling and may lead to further social withdrawal and

segregation.¹

To understand the psychological problems of the aging, there is a need to appreciate the social situation of these individuals and the available support in terms of financial, medical or social aspects they have. One of the greatest fears of getting old is the fear of losing power, independence and ability to have one's own choice. One of the most dreaded areas for the dependent elderly person is the vulnerability for exploitation i.e. physical and psychological.² The traditional pyramid of family structure in which there are many youth and few elderly is giving way to an inverse pyramid of one child, two parents, four grandparents, and several great grandparents.

From a research perspective, the scope of geriatric psychiatry should be broadened to go beyond dementia and depression. The elderly have anxiety disorders, schizophrenia, alcohol and other substance dependence, personality disorders etc. Studying these conditions will improve our knowledge not only of aging process but also of those specific disorders across the life span. Revision of our definitions of middle age

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and old age as well as some of our traditional thinking about chronological aging is also called for. It is possible that, with increasing longevity, the timetable for brain aging may have changed as well³. Looking into the gravity of the situations and paucity of literature in geriatric psychiatry, present study was undertaken to identify various socio-demographic determinants which are responsible for higher prevalence of psychiatric problems in the old age.

Material and Methods

This study was conducted in newly created geriatric clinic of PBM Hospital, Bikaner. Eight out of first 20 registered patients of geriatric clinic of each out patient clinic were randomly selected. This study was conducted for a period of one year. Four hundred elderly patients aged 60 years or above formed the sample for our study. Those patients who were uncooperative for psychiatric evaluation were excluded from the study.

All the patients were clinically assessed and diagnosis was made in consultation with a qualified psychiatrist according to the ICD 10 guidelines. Mini-mental status examination (MMSE) scale, Hamilton's Anxiety Rating scale, Yesavage's Geriatric Depression scale (GDS), Presumptive Stressful Life Events scale (PSLE), Social Occupational Functioning Assessment scale (SOFAS) were used for their mental status assessment. Statistical analysis of relationship of psychiatric morbidity to socio-demographic and psychosocial variables was done.

Results

In our study 116 of 400 patients (29%) were having one or other type of psychiatry illness (Table 1). Depression was diagnosed in 32 (27.6%) patients out of which 24 were of mild severity and rest 8 was of moderate severity. Other depressive illnesses diagnosed were dysthymia (n=24) and recurrent depression (n=16). Thus, a total of 72 patients out of 116 patients (62.0%) were having one or other type of depressive illness. There were 20 patients (17.2%) with cognitive impairment, 16 patients (13.8%) with anxiety disorders, 4 patients (3.5%) with alcohol dependence and 4 patients (3.5%) of non organic insomnia. Table 2 shows sixty patients (51.7%) sufferings from psychiatric illnesses were in the age group above 70 years. Past history of psychiatric illness was present in 36 patients and a large number of depressed patients (44%) had such history

Table I: Pattern of psychiatric morbidity in 116 patients

| S. No. | Diagnostic category | Number (n=116) |
|--------|---|-----------------------|
| 1 | Depressive disorder (F32) Mild (F32.0) Moderate (F32.1) | 32 (27.6%) 24 8 |
| 2 | Dysthymic disorder (F34.1) | 24 (20.7%) |
| 3 | Cognitive impairment (MMSE <24) | 20 (17.2%) |
| 4 | Generalized anxiety disorder (F41.1) | 16 (13.8%) |
| 5 | Recurrent depressive disorder (F33.0) | 16 (13.8%) |
| 6 | Non organic insomnia (F51.0) | 4 (3.5%) |
| 7 | Alcohol dependence (F10.2) | 4 (3.5%) |

() ICD coding – 10 / MMSE guidelines

($\chi^2=23.65$, $df=1$, $p<0.001$) (Table 3). Table 4 shows associated medical illnesses in 116 patients with psychiatric diagnosis. Hypertension was more commonly associated with psychiatric illness than any other chronic illness.

Discussion

At the outset, it is important to mention that our study sample was quite specific as the users of newly created geriatric clinic were primarily educated, professionals and in higher income groups, who were aware of existence of these services in the hospital. Thus results of present study can not be generalized to population at large.

In the present study, prevalence of psychiatric morbidity was 29% (n=116) comparable with the previous studies. Barret et al (1988) reported 26.5% psychiatric morbidity while a retrospective study from Boston, reported 31.21% psychiatric morbidity in aged above 65 years.^{4, 5}

It is interesting to note that about 50% persons were having some cardiovascular problems (including hypertension). Consistent with the findings of previous studies, our study showed increased rates of psychiatric morbidity in semiskilled and skilled workers as opposed to employers and managers.⁶ Like other studies, there was a powerful relationship between unemployment and psychiatric morbidity in our study.⁷ Certainly the state of being unemployed is more likely to be associated with anxiety and depression than being employed.^{8, 9}

Table 2: Distribution of patients according to age

| S.N. | Age (yrs.) | ICD / MMSE Diagnosed Psychiatric Patients (n=116) | | | | | | | No psychiatric diagnosis (n=284) | Total (n=400) | |
|------|------------|---|-------------------------------------|-------------------------------------|---------|----------------------------------|--------------------------|----------------------------|----------------------------------|---------------|---------------|
| | | Depressive disorder total n=32 (%) | Dysthymic disorder total n = 24 (%) | Cognitive impairment total n=20 (%) | GAD | Recurrent depressive mild (n=16) | Alcohol dependence (n=4) | Non organic insomnia (n=4) | | | Total (n=116) |
| 1 | 60-64 | 24 (75%) | 8 (33.33%) | - | - | 8 (50%) | 4 (100%) | 4 (100%) | 48 (41.38%) | 136 (47.89%) | 184 (46%) |
| 2 | 65-69 | - | 4 (16.67%) | - | 4 (25%) | - | - | - | 8 (6.90%) | 96 (33.80%) | 104 (26%) |
| 3 | 70-74 | 8 (25%) | 12 (50%) | 4 (20%) | 4 (25%) | 8 (50%) | - | - | 36 (31.03%) | 32 (11.27%) | 68 (17%) |
| 4 | ≥75 | - | - | 16 (80%) | 8 (50%) | - | - | - | 24 (20.69%) | 20 (7.04%) | 44 (11%) |

ICD / MMSE diagnosed psychiatric patients v/s ICD non diagnosable patients $X^2 = 11.403$ df = 1 p < 0.001 (Highly significant) (1 & 2 clubbed v/s 3 & 4 clubbed)

Table 3: Distribution of cases according to past history of psychiatric illness.

| S.N. | Past history of psy. illness | ICD / MMSE Diagnosed Psychiatric Patients (n=116) | | | | | | | | No. Patients psychiatric diagnosis not given (n=284) | Total (n=400) | |
|------|------------------------------|---|---------------------------------|--------------------------------------|--------------------------------|-----------------------------|------------|----------------------|----------------------------|--|---------------|---------------|
| | | Depressive disorder total n=32 | Dysthymic disorder total n = 24 | Recurrent depressive mild (n=16) (%) | All depressive disorder (n=72) | Cognitive impairment (n=20) | GAD (n=16) | Alcohol depen, (n=4) | Non organic insomnia (n=4) | | | Total (n=116) |
| 1 | Present | - | 16 (66.67%) | 16 (100%) | 32 | - | - | 4 (100%) | - | 36 (31.03%) | - | 36 (9%) |
| 2 | Absent | 32 (100%) | 8 (33.33%) | - | 40 | 20 (100%) | 16 (100%) | - | 4 (100%) | 80 (68.97%) | 284 (100%) | 364 (91%) |

Diagnosable psychiatric patients (n=116) v/s Non diagnosable patients (n = 284) $X^2 = 23.65$ df = 1 p < 0.001 (Highly significant)

Depression has been reported to be the commonest psychiatric problem in elderly. Although prevalence rates of depression in medical outpatients vary from 7% to 36%, which on average is about 5% higher than rates in the community. However, 18.0% (n=72) prevalence in our study could be explained on the basis of sample bias. Our results were close to those reported by Perez-Stable et al of 16%, Callahan et al of 15%, Almeida et al of 19.53% in elderly medical outpatients.^{10,11,12} Depression tends to diminish with advancing age, which is consistent with previous reports.¹³ Our observations that depressive disorders are more common in elderly women (37.5%) than men (14.28%) is consistent with that reported in previous studies.^{14,15} Depression is commoner among elderly with low educational level and lower income groups.^{14,16} This also indicates an inverse relationship between socio-demographic status and depression.

Past history of psychiatric illness has long been heralded as an important marker for depression. We found a positive past history of psychiatric illness in large number (44%) of depressed patients which is consistent with the available reports.^{17,18,19} In our study, patients of different medical illnesses have been reported to be associated with depression similar to

previous studies.^{18,19,20} Investigators, however, failed to identify specific diseases in which depressive symptoms are particularly common.^{17,21,22,23} In this study, depressive symptoms were most frequently experienced with cardiovascular disease in general and hypertension in particular, which is similar to that reported in the literature.^{24,25,26} Moreover, results from this study indicate that depressive symptoms are directly associated with number of chronic conditions.^{10,17,22}

In our study, 5.0% were diagnosed to have cognitive impairment. The results are similar to that reported by Waxman and Carner (1984) in which 5.7% of their small urban primary care patient group (>age 64 years) had cognitive decline.²⁸ In a similar study, Lyness et al reported 5% cognitive impairment in a primary care setting (≥ 60 years).^{28, 29} It is interesting to note that all the subjects diagnosed as cognitive impairment had comorbid cardiovascular pathology. It is commonly believed that in old age, people are anxious about themselves and their circumstances in life. This could be a reason for low rate (4%) of anxiety disorders in our sample. Researches have also focused considerable less attention on late life anxiety in primary care population than depression.³⁰ Alcohol

Table 4: Distribution of cases according to associated physical illness

| Associated physical illness | ICD / MMSE Diagnosed Psychiatric Patients (n=116) | | | | | | | | Patients ICD-10 psychiatric diagnosis not given (n=284) | Total (n=400) |
|---------------------------------------|---|---------------------------|---------------------------|---------|----------------------------------|--------------------------|----------------------------|---------------|---|---------------|
| | Depressive disorder n=32 | Dysthymic disorder n = 24 | Cognitive impairment n=20 | GAD | Recurrent depressive mild (n=16) | Alcohol dependence (n=4) | Non organic insomnia (n=4) | Total (n=116) | | |
| Hypertension | 8 (25%) | - | 12 (60%) | 8 (50%) | 8 (50%) | 4 (100%) | - | 36 (31.03%) | 76 (26.76%) | 112 (28%) |
| HT and other chronic physical illness | 12 (37.50%) | 4 (16.67%) | - | - | 4(25%) | - | - | 32 (27.59%) | 56 (19.72%) | 98 (22%) |
| DM | - | - | - | 4 (25%) | - | - | - | 4 (3.45%) | 32 (11.27%) | 36 (9%) |
| DM and other chronic physical illness | 4 (12.50%) | - | - | - | - | - | - | 4 (3.45%) | 12 (4.235%) | 16 (4%) |
| Osteoarthritis | 8 (25%) | - | - | - | 4 (25%) | - | - | 12 (10.34%) | 40 (14.08%) | 52 (13%) |
| OA and other chronic physical illness | - | - | - | - | - | - | - | - | 8 (2.82%) | 8 (2%) |
| Constipation | - | 8 (33.33%) | - | 4 (25%) | - | - | - | 12 (10.34%) | 5 (20%) | 32 (8%) |
| COPD | 4 (16.67%) | - | - | - | - | 4 (100%) | 8 (6.90%) | 12 (4.23%) | 20 (5%) | |
| Anemia | - | - | - | - | - | - | - | - | 16 (5.64%) | 16 (4%) |
| BPH | - | - | - | - | - | - | - | 8 (2.82%) | 8 (2%) | |
| Gall bladder stones | - | - | - | - | - | - | - | - | 8 (2.82%) | 8 (2%) |
| No prolonged physical illness | - | 8 (33.33%) | - | - | - | - | - | 8 (6.90%) | - | 8 (2%) |

abuse/dependence in old age in our Indian culture is much less (1%) than that reported in Western culture.³¹

Conclusion

In the present study, 29% (n=116) of the patients could be given a psychiatric diagnosis. Prevalence rate of depression was 18.0% (n=72) and majority of them (n=56) were below 70 years of age. History of psychiatric illness was recorded in 44% (n=32) of depressed patients. Patients having hypertension with or without any other chronic illness suffered more of depression 58.6% (n=68) as compare to nonhypertensive patients. Twenty cases (5.0%) of cognitive impairment were diagnosed based on clinical criteria and with social and occupational impairment. It is concluded that a large number of people above 60 years of age have psychiatric problems. The situation is further complicated by presence of one or more physical illness, producing stress on aged people.

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Geriatric Neurology

Geriatric Neurology is an upcoming subspecialty. Considering paucity of literature on the subject in general and in Indian context in particular, it has been proposed to bring out a special issue of the Journal of Indian Academy of Geriatrics (JIAG) on geriatric neurology in early 2006. Prospective authors are requested to send original articles, brief communications and interesting case reports relevant to the subject.

For review articles, authors are requested to confirm the topics with us.

Scientific communications related to geriatric neurology may please be addressed to:

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