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PREVALENCE OF PSYCHIATRIC ILLNESS IN ELDERLY POPULATION VISITING A MEDICINE OPD OF A TERTIARY CARE HOSPITAL

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ABSTRACT **Background:** Elderly individuals, especially those suffering from chronic illnesses are often susceptible to an increased risk of psychiatric illnesses owing to combination of disease and age-related stresses. We assessed the prevalence of psychiatric illnesses in elderly patients visiting a medicine OPD at a tertiary care centre in north India. **Method:** A total of 110 elderly patients (aged >60 years) attending Medicine OPD were enrolled in the study. Patients with critical illness, mental retardation, acute medical illness and those on psychotropics were excluded from the study. Demographic information and medical history was obtained and all the patients were subjected to psychiatric examination and closed interview as per ICD-10 guidelines. General Health Questionnaire-12 (GHQ-12) was used to screen the psychiatric morbidity and Mini International Neuropsychiatric Interview (MINI). The psychiatric diagnosis was made using ICD-10 classification. Data was analyzed using SPSS 18.0 software. Chi-square and Independent sample's 't'-test were used for comparisons. Results: Psychiatric illness was prevalent in 62 (56.4%) of elderly patients. Patients with psychiatric illness had significantly lower mean age as compared to those not having psychiatric illness. Psychiatric illness was significantly associated with female sex, widowed marital status and homemaking. Among psychiatric illnesses, adjustment disorder (n=33; 53.2%) and moderate depression with somatic syndrome (n=18; 29%) were most common. Proportion of those with diabetes and hypetension was significantly higher among those with psychiatric illness as compared to those who did not have psychiatric illness (p<0.001). **Conclusion:** The burden of psychiatric morbidity was quite high in elderly medicine OPD patients.

KEYWORDS : Elderly OPD patients, psychiatric illness, Medicine OPD, chronic illness.

INTRODUCTION

Mental disorders are quite frequent in elderly population1-3. Evidence has shown that mental disorders also affect the somatic health of the elderly4. In fact a large number of elderly visiting healthcare facilities have undiagnosed psychiatric morbidity burden5,6. Among elderly individuals having a chronic illness, coexistence of psychiatric morbidity has a multiplying effect on overall morbidity related burden that influences their quality of life drastically, more so wheneated.sychiatric morbidity is undiagnosed and untreated. In countries like India, the diagnosis and management of psychiatric problems in older people admitted to general hospitals is quite dismal. It has been shown that diagnosis of common psychiatric disorders like delirium and cognitive problems are missed in around 32 to 67% of elderly patients visiting a general hospital7-9. There are clinical studies which demonstrate that these conditions could be prevented from developing and treated in general hospitals itself10,11.

Recent studies have indicated that psychiatric disorders are quite common in elderly but clinical expression of psychiatric disorders in old age may be different from that seen in younger age groups, with less and often milder symptoms. Concurrently, comorbidity between different psychiatric disorders is immense, as well as comorbidity with somatic disorders12,13. Owing to their less intense and mild manifestation, these disorders often remain undiagnosed and unattended.The psychiatric illness in elderly patients could be driven by the socio-demographic and illness profile of the elderly apart from the life stressors and other variables.

In present study, we make an attempt to measure the burden of psychiatric morbidity in elderly Medicine OPD patients at a tertiary care centre in North India and try to find its sociodemographic and clinical determinants.

MATERIAL AND METHOD

The present study was carried out at the outpatient Department of Medicine, Era's Lucknow Medical College, Lucknow after obtaining ethical clearance from Institutional Ethics committee. A total of 110 elderly patients (aged >60 years) having a medical disorder based on diagnosis made by physician based on clinical signs and symptoms for the first time/or a follow up case at the OPD were enrolled in the study after obtaining informed consent. Critically ill patients, those with mental retardation, having acute medical illness, on psychotropic medication and unwilling to participate were excluded from the study.

A physical diagnosis was made by the physician based on reported illness, clinical examination, and also reviewing the OPD records maintained in the clinic. Demographic information was retrieved and relevant case notes were made in OPD records and these were informed about the cause of the initial visit, other current diagnosis and medications prescribed. The psychiatric examination and closed information interview were performed based on ICD-10 guidelines (World Health Organization, 1992). The mean time that was taken for the semi-structured psychiatric examination

was 70 minutes (range 30-120 minutes). All diagnoses of normal disorders were made according to ICD-10 criteria. Psychiatric morbidity was screened using General Health Questionnaire – 12 Items (GHQ-12) and MINI (Mini-International Neuropsychiatric Interview).

Data so obtained was subjected to statistical analysis using SPSS 18.0 Software. Chi-square and Independent samples 't'-tests were used to compare the data.

RESULTS
Psychiatric illness was prevalent in 62 (56.4%) of elderly patients. Mean age of patients with psychiatric illness was significantly lower (65.74±9.17 years) as compared to that of patients without psychiatric illness (70.81±10.07 years) (p=0.007). In the group of patients with psychiatric illness, majority were females (61.29%), Hindus (67.74%), homemakers (62.90%), married (85.48%), rural (53.23%), literate (51.61%) and lived in a nuclear family (63.23%). Average monthly income of patients with psychiatric illness was Rs 7798±10403. Compared to this, among those not having psychiatric illness, majority were males (60.42%), Hindus (56.25%), non-homemakers (62.50%), married (100%), rural (52.08%), literate (64.58%) patients who lived in nuclear families (60.42%). Average monthly family income of these patients was Rs 11279±17112. Statistically, younger mean age, female sex, homemaking and widowed marital status were significantly associated with psychiatric illness (Table 1). Among psychiatric illnesses, adjustment disorder (n=33; 53.2%) and moderate depression with somatic syndrome (n=18; 29%) were most common. Anxiety (14.5%) and severe depression without psychotic symptoms (3.2%) were the other psychiatric morbidities diagnosed (Table 2).

Diabetes and hypertension alone or in combination were the most common medical disorders. Hypertension alone affected 36 (32.7%) patients followed by combination of hypertension and diabetes (n=30; 27.3%), diabetes mellitus alone (n=24; 21.8%), chronic kidney disease (n=10; 9.1%), chronic liver disease and tuberculosis (n=3; 2.7% each) and chronic myeloid leukemia and chronic pulmonary disease (n=2; 1.8% each) respectively. All the patients with psychiatric morbidity had diabetes mellitus and/or hypertension. Statistically, a significant difference between two groups was observed with respect to profile of medical illnesses (p<0.001) (Table 3).

DISCUSSION
The prevalence of psychiatric problems and illnesses was observed to be 56.4%, thus indicating that majority of elderly patients in our medicine OPD had psychiatric illnesses. The prevalence of psychiatric illnesses among non-psychiatric elderly patients in different studies has been reported to vary substantially. In different studies from abroad its prevalence among non-psychiatric patients has been reported to range from 32-64%[14-18]. However, Indian studies have reported its prevalence to be relatively less. Sood et al.[19] reported their prevalence to be 49% while Naveen and Sudhakar[20] found them in 44.8% of their elderly patients. However, Prakash et al.[21] found this prevalence to be only 29%. The difference in prevalence of psychiatric illnesses in this set of geriatric population could be attributed to the difference in profile of patients in different studies as well as different tools used to diagnose psychiatric problems and illnesses. Despite these differences, the fact that psychiatric illnesses exist in non-psychiatric elderly patients and often remain undiagnosed cannot be ruled out and is highlighted in almost all the studies.

In present study younger age, female sex, homemaking and widowed status were found to be significantly associated with increased risk of psychiatric illness while religion, place of residence, literacy, family type and average monthly income did not show an association with psychiatric illness. The sociodemographic determinants of psychiatric morbidity in elderly non-psychiatric patients in a hospital have shown a diversified picture in different studies. Kumar et al. [22] in their study found Psychiatric disorders were more common among females and in patients living in nuclear families. Boralingaiah et al.[23] on the other hand held >75 years age as a significant risk factor. Naveen and Sudhakar[20] age, gender, literacy and economic status to be significantly associated with psychiatric disorder prevalence. Wondale et al.[24] also found that widowhood had higher odds of psychiatric illness. These findings highlight the relevance of social support to avoid psychiatric illnesses especially among those patients who had lost their spouses owing to the fact that all such patients had psychiatric disorder.

In present study, among patients with psychiatric disorders, majority had adjustment disorders (53.2%) followed by moderate depression with somatic syndrome (29%), anxiety (14.5%) and severe depression without psychotic symptoms (3.2%) respectively. The profile of psychiatric disorders and illnesses as diagnosed in different geriatric patients with non-psychiatric illnesses varies substantially in different studies. Among different studies from Indian subcontinent, mood disorders and depression have been reported to be the most common psychiatric illnesses. Singh et al. (2004)[25] reported Mood disorders (48.07%) as the prominent psychiatric disorder among elderly patients while Sood et al. (2006)[19] reported depression (53%), Prakash et al.[21], Kumar et al.[22] and Seby et al.[26] also reported depression to be the major psychiatric disorder with its prevalence ranging from 61% to 62.5%. Although Thapa et al.[27] also reported depressive disorders to be the leading cause of psychiatric illnesses among elderly yet they reported its prevalence to be only 26.3%. In contrast, in present study, adjustment disorders (53.2%) were most common while prevalence of depression was 32.2%. The reason for this difference could be the difference in profile of patients. In present study we included only medical OPD patients in elderly age group. Although profile of patients in present study was similar to that reported by Naveen and Sudhakar[20] yet focus of detection of psychiatric illnesses was variable. In present study we focused on a host of psychiatric illnesses and used a versatile evaluation plan that included assessment through various scales like GHQ-12, MINI and ICD-10.DCR whereas Naveen and Sudhakar[20] focused on the cognitive impairment and depression among elderly subjects attending medical OPD and that is why they found that among psychiatric disorders depression was leading cause (44.8%) followed by cognitive impairment (31%). Use of versatile tools in present study helped to identify various types of psychiatric disorders and problems more clearly and provided a better idea than the previous studies.

In present study, a significant association between psychiatric disorder and type of medical illness was observed. Psychiatric disorders were less common in patients with CKD, CLD, CML, COPD, Hypertension with Diabetes mellitus and tuberculosis as compared to those with Diabetes mellitus or hypertension only. One of the reasons for this could be attributed to relatively higher social support drawn by chronic irreversible diseases like CKD, CLD, CML and COPD. On the other hand, diabetes mellitus and hypertension being relatively common and prolonged disorders draw lesser social support. As such out study was limited by the fact that the chronic irreversible illnesses like CKD, CLD, CML and COPD had a limited representation and as such it was difficult to assess their relevance in context with prevalence of psychiatric disorders, thus the present study in effect undermines the type of medical disorder as a determinant of psychiatric disorder prevalence. The findings of the study showed that the prevalence of psychiatric illnesses in elderly patients visiting a Medicine

OPD is quite high, especially in those patients who are suffering from diseases that require prolonged treatment, viz. diabetes and hypertension. The study highlighted the need for an early identification of psychiatric illnesses in elderly.

CONCLUSION

The study highlighted a high burden of psychiatric illnesses in elderly patients visiting a general medical facility. The study underscores the need for early detection and treatment of psychiatric disorders in elderly patients identifying them as a high risk group.

SN	Characteristic	Psychiatric illness present	Psychiatric illness absent	Statistical significance
1.	Number of elderly patients	62 (56.4%)	48 (43.6%)	-
2.	Mean age±SD (range) years	65.74±9.17 (60-105)	70.81±10.07 (60-100)	't'=2.756; p=0.007
3.	Sex			
	Male	24 (38.71%)	29 (60.42%)	2=5.106; p=0.024
	Female	38 (61.29%)	19 (39.58%)	
4.	Religion			
	Hindu	42 (67.74%)	27 (56.25%)	2=2.520; p=0.284
	Muslim	20 (32.26%)	20 (41.67%)	
	Sikh	0	1 (2.08%)	
5.	Occupation			
	Farmer	19 (30.65%)	22 (45.83%)	2=14.9; p=0.002
	Homemaker	39 (62.90%)	18 (37.50%)	
	Teacher	1 (1.61%)	8 (%)	
	Others	3 (%)	0	
6.	Marital status			
	Married	53 (85.48%)	48 (100%)	2=7.589; p=0.006
	Widow/Widower	9 (14.52%)	0	
7.	Place of residence			
	Rural	33 (53.23%)	25 (52.08%)	2=0.014; p=0.905
	Urban	29 (46.77%)	23 (47.92%)	
8.	Literacy status			
	Illiterate	30 (48.39%)	17 (35.42%)	2=1.86; p=0.173
	Literate	32 (51.61%)	31 (64.58%)	
9.	Type of family			
	Joint	29 (46.77%)	19 (39.58%)	2=0.569; p=0.451
	Nuclear	33 (53.23%)	29 (60.42%)	
10.	Average monthly income±SD (IRs)	7798±10403	11279±17112	't'=1.318; p=0.190

Table 2: Type of Psychiatric Disorder (n=62)

SN	Psychiatric Illness	No. of cases	Percentage
1.	Adjustment disorder	33	53.2
2.	Anxiety NOS	9	14.5
3.	Moderate depression with somatic syndrome	18	29.0
4.	Severe Depression without psychotic symptoms	2	3.2

Table 3: Comparison of Medical Illness of Study Population

Medical Illness	Total	Psychiatric illness present (n=62)		Psychiatric illness absent (n=48)	
		No.	%	No.	%
Chronic kidney disease (CKD)	10	0	0.00	10	20.83
Chronic liver disease (CLD)	3	0	0.00	3	6.25
Chronic myeloid leukemia (CML)	2	0	0.00	2	4.17
Chronic obstructive pulmonary disease (COPD)	2	0	0.00	2	4.17
Diabetes mellitus (DM)	24	23	37.10	1	2.08
Hypertension (HTN)	36	36	58.06	0	0.00
HTN & DM	30	3	4.84	27	56.25
Tuberculosis (TB)	3	0	0.00	3	6.25

$X^2=95.126; p<0.001$

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