ORIGINAL ARTICLE

Psychiatric Disorders in Elderly Patients attending OPD of Tertiary Care Centre in Eastern region of Nepal

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Abstract

Introduction: *Nearly 25% of the elderly peoples have significant psychiatric symptoms. Although mental disorders are common among elderly all over the world, information on the extent and types of geriatric psychiatric disorder is limited in our settings.*
Objective: *To find out the prevalence of different psychiatric morbidities in elderly population and to study associated demographic variables.*
Method: *A total of 210 consecutive elderly (60 years and older) patients in psychiatric OPD were enrolled in a period of one year, after taking informed consent. Mini Mental State Examination (MMSE) was done as screening tool for the assessment of cognitive impairment. Diagnoses were made according to ICD-10 guidelines. Data were analysed using SPSS.*
Result: *Out of 210 cases, females slightly outnumbered males. The mean age of patients was 67.29 years ± 7.302. Most of the patients were Hindu by religion, illiterate and married. Most common primary psychiatric illness was Depression (n=77, 36.7%) followed by Neurotic, stress related and somatoform disorders (n= 29, 13.8%). Twenty seven patients (12.9%) had alcohol dependence syndrome, twenty four cases (11.4 %) had Dementia, seventeen cases (8.1%) had Bipolar affective disorder, thirteen cases were of schizophrenia and other psychotic illnesses.*
Conclusion: : *Depression was the most common psychiatric illness among geriatric population followed by anxiety spectrum disorders, alcohol dependence syndrome and dementia.*

Keywords: Psychiatric Disorder, Elderly Patient, Depression

INTRODUCTION

According to the United Nation, there has been exponential growth of elderly people (over 60 years of age) in the world since 1960. One out of every ten people is now elderly; by 2050, one out of five will be elderly; and by 2150, one out of three people will be elderly. The percentage is currently much higher in the more developed regions than in the less developed, but the pace of ageing in developing countries is more rapid. In 2000, there were 605 million persons more than
60 years age. In 2025, there will be more than 1 billion elderly people in the world, 75% of whom will be in developing countries and by 2050, the number will be 2 billion. [1] In Nepal, there were 1.5 million geriatric population (aged above 60) constituting 6.5% of the total population according to 2001 national census. This population increased in 2011 to 2.7 million, accounting for 9% of total population. Annual population growth of Nepalese elders is higher (3.6%) than the general population growth of 1.4%. [2]

Mental illness in elderly person varies widely; conservatively estimated 25% have significant psychiatric symptoms.[3] Certain

psychiatric disorders increase in frequency with advancing age.

Although mental disorders are common among elderly all over the world, information on the extent and types of geriatric psychiatric disorder is limited in our settings. So, we conducted this hospital based descriptive study with the aim of finding out the prevalence of different psychiatric morbidities in elderly population and to study associated demographic variables.

MATERIAL AND METHOD

It was a prospective and descriptive study over a year. Ethical clearance was taken from the Institutional Ethical Review Committee of the institute. All patients over 60 years of age coming to psychiatry OPD of B. P. Koirala Institute of Health Sciences (BPKIHS) from February 2013 to January 2014 were included in the study after taking written informed consent. Demographic profiles were noted down using a semi-structured Proforma developed by the department for this purpose. Case work up was done and Mini mental state examination (MMSE) was applied to all patients, unless there were any limitations in patients (like inability to speak, severe hearing impairment, violence/ agitation). The psychiatric diagnoses were based on International Classification of Diseases (ICD-10) Classification of Mental and Behavioral Disorders, Clinical descriptions and diagnostic guidelines. The data were recorded in Microsoft Excel 2007 and analysed using Statistical Package for the Social Sciences (SPSS) version 16.0

RESULT

Sociodemographic details of subjects is described in Table 1.

Figure No 1 shows that among the subjects enrolled (n=210), the most common primary psychiatric illness was Depression (n=77, 36.7%) followed by Neurotic, stress related and somatoform disorders (n= 29, 13.8%). Twenty seven patients (12.9%) had alcohol dependence syndrome who fulfilled criteria for dependence in past and presented in remission. Twenty four of the cases (11.4 %) were diagnosed as Dementia.

Seventeen cases (8.1%) had Bipolar affective disorder, thirteen cases were of schizophrenia

Table no. 1: Socio-demographic distribution (N=210)

Characteristics	Category	Frequency (n=210)	Percent (%)
Gender	Female	107	51
	Male	103	49
Age(years)	60 – 64	92	43.8
	65 - 69	51	24.3
	70 - 74	23	10.9
	75 - 79	22	10.5
	≥80	22	10.5
Religion	Hindu	151	71.9
	Kirat	53	25.2
	Other	6	2.9
Education	Illiterate	146	69.5
	Primary	23	10.9
	Secondary	30	14.3
	Higher secondary	1	0.5
	Bachelor	9	4.3
	Masters	1	0.5
Address	Sunsari	102	48.6
	Morang	27	12.9
	Jhapa	20	9.5
	Saptari	18	8.6
	India	10	4.7
	Other part of Nepal	33	15.7
Domicile	Urban	185	84.1
	Rural	25	15.9
Marital Status	Married	181	86.2
	Widow/widower	26	12.3
	Divorced	2	1
	Unmarried	1	0.5
Occupation	Farmer	79	37.6
	Unemployed/Retired	12	5.7
	Businessman	26	12.4
	Housewife	3	1.4
	Service	90	42.9
Socioeconomic Status	Low	68	32.4
	Low middle	122	58.1
	Middle	18	8.6
	High	2	0.9

and other psychotic illnesses including Schizophrenia (n=4), schizoaffective disorder (n=2), Persistent delusional disorders (n=2), Unspecified psychosis (n= 5).

Other illnesses in the subjects were Insomnia (n= 4), Headache (n= 4), Self harm attempt-impulsive (n=2), Cannabis dependence syndrome (n=2), Delirium due to medical conditions (n=5), Parkinsonism (n=1), Accidental poisoning (n=1). Four patients had no syndromal psychiatric diagnosis.
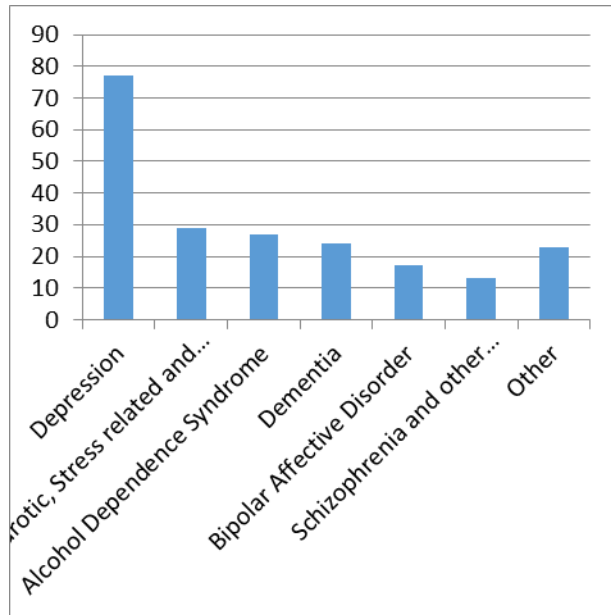
Fig. 1: Psychiatric Morbidity of Geriatric Patients

DISCUSSION:

SOCIO-DEMOGRAPHIC PROFILE:
Age and Sex distribution:
Most of the patients were of age 60-64 years (43.8%) followed by the age group of 65-69 years (24.8%). The mean age of patients was 67.29 ± 7.302 years. The minimum age was 60 years and maximum was 89 years.

Our findings correspond to the findings of earlier study in Nepal, which shows that mean age of the patients was 69.4 ± 4.3 years [4] and to the finding of study of Pereira YDS et al in which 70% of the sample were of age group 60-69 years, with mean age of 65.8 ± 6.11 years.[5] Our finding is in accordance to study by Singh GP et al [6] which showed age group 60 - 65 years had highest proportion (56.9%) followed by 66-70 years (19.34%). In a study by Gupta S also, significant proportion of the patients presenting to psychiatry OPD were of age group 60-69 years (76.25%).[7]

Our study is consistent with the finding of another study done by Aich TK et al in which 64.5% were in the age range of 60-69 years, 31.5% of them were in the age range of 70-79 years and the remaining 5.1% patients were aged 80 years or above.[8] In our study, female patients (50.95 %) were slightly more than male patients (49.05 %). This finding is consistent with the study of Pereira YDS et al [5] and also with study by Shakya DR[9] in the same setting in 2009 which showed 54% female patients presenting to psychiatry OPD. Irrespective of the location of study setting, studies from Nepal and India show similar age distribution among geriatric patients which demonstrate more illnesses in the younger elderly age group. This reflects the lower life expectancy of Nepal and also shows that with the progressing age, probably due to deteriorating physical strength or ability to reach hospitals; older patients are less likely to visit health facility. Greater proportion of females in psychiatry OPD of tertiary care centre shows increasing awareness of peoples to mental illnesses. The higher number of female patients may be due to higher population of females in community as shown by recent national population census.

Religion, Marital Status and Education Status:
The distribution of population by religion in Nepal shows: Hindu 81.3%, Buddhist 9%, Muslim 4.4%, Kirat 3%, Christian 1.41% of total population. [2] In our study, majority of patients (n= 151, 71.9%) were Hindu by religion followed by 25.2% Kirat and only small proportion of them were Buddhist, Muslim and Christian. Greater proportion of Kirat peoples in comparison to national data may be due to the fact that local population has preponderance of peoples who are Kirat by religion. A community study in local area Dharan by Niraula et al [10] showed that 81.3% of geriatric population of this locality was Hindu by religion followed by Kirat religion (11.6%). This finding also supports our finding.

In our study, 86.2% cases were married, 12.3% were widow/widower; 2 out of 210 patients were divorced/ separated and only one was unmarried. This finding is consistent with a study done by Pereira GDS [5] and also with study done by Singh GP et al. [6]

This shows that most of the patients are married in our part of the world and very small proportion of them remains unmarried. It also shows importance of family and society in the management of mental illness, by the fact that separated or unmarried peoples are not seeking treatment due to poor family support.

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More than two thirds of patients (n=146, 69.5%) were illiterate. One fourth (25.2%) were educated up to SLC level and only 11 out of 210 cases were educated more than this level. This finding is similar to the finding of study conducted by Pereira et al[5]; Khattri JB et al [11]. In the study done by Singh GP et al, only 34.25% were illiterate.[6] In a community study conducted by Niraula SR et al, 54.8% elderly population of the local city Dharan were illiterate.[10] Our finding is nearly similar to this finding and it shows that educational level of elderly in the community as well as those presenting to hospital is almost similar.

The findings in this study shows that majority of the study population are illiterate; as there were few schools that to for the elite and privileged group when the patient were in the school going age. This could be one of the reasons of showing mental illness among peoples of lower educational level as well.

Occupation and Socioeconomic Status:
In our study, most of the cases (42.9%) were unemployed/ retired. Seventy nine (37.6%) subjects were farmer by occupation followed by 12.4% of housewife female subjects. This result is nearly similar to the finding of study conducted by Niraula SR et al in which 55.7% peoples of age 60 years and more in the locality were unemployed.[10]

Similar finding was seen in study by Gupta S, in which 31.25 % of geriatric patients were unemployed, same percentage of subjects was farmer by occupation and 23.75% were housewives. [7] In a retrospective hospital based study, done in Chandigarh, India, it was shown that 39.78% were housewives, 33.70% were retired and 5.52% were farmer.[5]

The data provides idea about significant dependent population in this age group. Also, presentation of greater proportion of physically inactive peoples to psychiatry OPD demonstrates greater prevalence of mental illness among them than physically active individuals.

In our study, socioeconomic status was determined on the basis of financial, educational and occupational status. Most of the cases (58.1%) were from low middle status followed by 32.4% from low status, 8.6% middle and 0.9% from high socioeconomic status.

This finding demonstrates low prevalence of mental illness in people from high and middle socioeconomic status. It proves the idea of Brown and Harris, 1978,1979; who had stated that economic status is one of the factors which indirectly determine the individual's vulnerabilities to illness.[12]

Geographic Distribution:
B.P koirala Institute of Health Sciences (BPKIHS), where this study was carried out, is situated in Sunsari district. Most of the patients were from these nearby districts and 4.7% cases were from India. Also, it was seen that most of the cases were from urban areas. It seems peoples from remote districts are either unaware of mental illness, or there are stronger stigmas over mental illnesses.

Psychiatric morbidities:
Our study showed that depression was the most common psychiatric illness in elderly population presented to our OPD. Our finding is consistent with other hospital based studies done in past. Study by Pereira YDS et al [5] showed mood disorder as commonest illness (43.7%); study by Singh GP et al [6] showed 48.07% having mood disorder. Likewise, 29.76% had depression in study by Tiple P et al [13] and study by Gupta S[7] showed mood disorder (35%) as the commonest illness. Study done in 2009 in same setting by Shakya DR showed prevalence of depression as 39%. [9]

Our finding is nearly consistent with the findings of similar study done in TUTH by Khattri JB et al. in 2006, which showed 53.2% prevalence of depression.[11] The higher prevalence of depression in this study may be due to the fact that this study was primarily focused on depression and subjective rating scale was used in this study, ie: Geriatric depression scale (GDS).

A cross-sectional community based study done by Chowdhury A. et al showed that prevalence of psychiatric disorders was 49.2% out of which Depression (23.6%) was the most common diagnosis.[14] Another cross sectional comparative study done by Qusar S et al shows that psychiatric co-morbidities were significantly higher among elderly than young adults, showing Depressive disorder 18% being the commonest.[15]

Thus it is seen from our study and supported by other hospital based as well as community based studies that depression is the commonest psychiatric illness present in geriatric age group. Hospital prevalence is more than community prevalence as seen in literature and different comparable studies mentioned above.

Our study shows Neurotic, stress related and somatoform disorders (n= 29, 13.8%) as second most common psychiatric illness in elderly. Study done by Shakya DR in same setting in 2009 had shown Anxiety disorders comprising 22% of total cases, second common illness after mood disorder.[9] A study conducted in TUTH in 2009 among 42 geriatric inpatients showed higher prevalence of anxiety symptoms (76.1%).[4] This significantly high prevalence was seen probably because the study population was the geriatric patients admitted with medical illness, which might be the stressor to them. Finding of our study is consistent with the finding of study done by Singh GP et al which showed Neurotic, stress related and somatoform disorders (15.47%) as second commonest illness.[6] Study done by Tiple P et al [13] found anxiety as third commonest illness (8.68%) after depression and dementia. In a community study done by Chowdhury A. et al [14], the prevalence of Anxiety disorder was 10.8% which was third commonest illness after depression and dementia. This slight variation may be due to the fact that people are more worried of anxiety disorder, so presents to hospital earlier. So hospital prevalence is greater than community prevalence.

In our study, third commonest disorder was alcohol dependence syndrome seen in twenty seven patients (12.9%) who presented in remission. Our finding is consistent with earlier study conducted by Shakya DR[9] among 100 of elderly (>55 years age) outpatients which showed substance use disorders in 19% patients out of which 14% had alcohol dependence. Study conducted by Khattri JB et al with Sample size of 100 showed only 2 patients with substance use disorder.[11] In a study done in Western Region of Nepal, 5% of total subjects had alcohol dependence syndrome.[17] This prevalence is slightly less than that of our study. Our study showed higher prevalence of alcohol dependence than similar studies done in other

part of Nepal. This may be the fact that our study setting, BPKIHS is located in eastern part of Nepal where there is higher number of peoples of Rai/Limbu caste in which alcohol consumption is culturally sanctioned and is a part of their tradition. Higher prevalence of alcohol dependence (18.1%) was seen in a study done in inpatient setting in western part of Nepal by Aich TK et al [8] whereas in a outpatient setting study done by Prasad KMR et al [18], prevalence of alcohol related was 7% only. This variation in the findings may be due to the cultural difference in those localities.

Dementia was the 4th most common mental illness among our study subjects. There were 24 cases (11.4%) of dementia. This finding is in accordance to the similar study done in TUTH by Khattri JB et al.[11] in 2006 which had shown prevalence of dementia as 11% of which 6% was vascular dementia and 5% Alzheimer's dementia. Shakya DR[9] had reported prevalence of dementia as 6%. in same setting. Our finding is consistent with the finding of a study done by Tiwari SC et al [16] in old age home in which prevalence of dementia was 11.1%.

Our study shows 6.2% prevalence of schizophrenia and other psychotic illness. This data is consistent with the study by Khattri JB et al [11]. Most of the previous studies had shown higher prevalence of psychotic illness like 20.3% in the study by Aich TK et al [8], 43% in the study by Prasad KMR et al [18], 43.7% in the study by Bhogale GS et al [19], 12.2% in the study by Pereira et al [5], 31% in the study by Gupta S [7]. As in all these studies, the prevalence of psychotic illnesses is much higher than the general community prevalence of about 1%. So there is possibility of over diagnosis or the dementia in the later stages may have psychotic features. The lower prevalence of schizophrenia in our study in comparison to other studies is probably due to the poor familial support and lack of awareness. Since they are not able to ask their family members to take them to the hospital in the psychotic state, this may be the factor of lesser number of psychotic patients in our study. Another probable factor due to which there is variation in the prevalence of psychotic illness may be the geographical difference of the study sites.

Thus our study shows that significant proportion of geriatric patients presenting to our OPD had depression, anxiety, alcohol related disorders, dementia, bipolar affective disorder and psychotic illnesses with lesser proportion of other illnesses. Most of the findings were consistent with the previous studies done in similar setting of our country as well as India and other countries.

CONCLUSION:

Depression is the most common psychiatric illness among geriatric population followed by anxiety spectrum disorders, alcohol dependence syndrome and dementia.

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