

PSYCHIATRIC MORBIDITY IN ELDERLY PATIENTS ATTENDING OPD OF LUMBINI MEDICAL COLLEGE AND TEACHING HOSPITAL

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ABSTRACT

INTRODUCTION

Geriatric psychiatry patients are increasing but enough work has not been done in this area of Nepal. We conducted this study to find out the prevalence of different psychiatric morbidities in elderly population and to find out if there are any age and gender specific differences.

MATERIAL AND METHODS

Medical records of psychiatric patients above 65 years of age visiting outpatient department of Lumbini Medical College and Teaching Hospital from April 1, 2018 to March 31, 2019 were reviewed. Risks of having different psychiatric disorders was estimated using odds ratio.

RESULTS

A total of 300 cases were enrolled in the study. Mean age of the study group was 71.49 (SD=6.99). There were more females. Depressive disorder was the most common diagnosis followed by somatoform disorder, anxiety disorder, dementia and others. Depressive disorder was higher in females and in younger subgroup of the elderly patient. The risk of having dementia was higher in older group.

CONCLUSION

Depressive disorder was the most common psychiatric disorder followed by somatoform disorder in elderly patients above 65 years of age. Male patients were more likely to suffer psychiatric disorder as compared to females in this age.

KEYWORDS

Depressive disorders, Gender, Geriatric psychiatry, Psychiatric morbidities.

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INTRODUCTION

Out of the total world population, about 250 million are over the age of 65 years.¹ Improved health care promises longevity but social and economic conditions such as poverty, break up of joint families, and poor services for the elderly pose a psychiatric threat to them.²

The modern era of geriatric psychiatry began in early part of the nineteenth century with the differentiation of senile dementia, arteriosclerotic dementia, and presenile psychosis. The need for research in geriatric psychiatry has increased because of the growth in size of the elderly population. The large geriatric population has an equally high psychiatric morbidity.³ Nielsen studied mental illness in old age in a Danish population and found that a low prevalence of psychiatric disorders was associated with those living with spouse, a high rate was seen in those living with relatives or children, and the highest was for those living in an old age home.³

Aging of population is currently a global phenomenon. The number of elderly requiring mental health services will rise because of increased incidence of certain disorders, for example dementia.⁴ A plan is needed for provision of services to elderly persons with major mental disorder.⁵ Age and gender affect the onset, course, treatment and outcome of most psychiatric disorders. There have been a few studies in elderly in Nepal, however none has focused on age and gender specific differences.⁶⁻⁸ This study is designed to fulfill this research gap.

MATERIAL AND METHODS

This was a retrospective study done in Outpatient clinic of Department of Psychiatry, Lumbini Medical College, Palpa, Nepal. The study was done from April 1, 2018 till March 31, 2019. Ethical clearance was obtained from the institutional review committee of the College, vide letter dated 30th June 2019.

A retrospective review of departmental records of all patients older than 65 years of age visiting the out-patient clinic of the department from April 1, 2018 to March 31, 2019 was carried out. Demographic details and diagnosis of those patients were recorded in Microsoft Excel 2008. Data were double checked for accuracy and then imported into SPSS-16 for analysis. Psychiatric diagnosis was made as per ICD-10 criteria. Different psychiatric diagnoses were treated as dependent variables; age and gender were treated as independent variables. Descriptive results were presented as frequency and percentages. Risk of having different psychiatric illness was estimated using odds ratio (OR). *p* value less than 0.05 was considered as statistically significant.

RESULTS

There were total of 300 cases meeting the inclusion criteria. Of them, 179 (59.7%) were female and the rest 121 (40.3%) were male. Mean age of the study population was 71.49 years (SD = 6.99, range = 28). Distribution of psychiatric disorders in the cases was as in Table 1. It showed that depressive disorders were the most common followed by somatoform disorders, anxiety disorders and others.

Table 1. Distribution of psychiatric disorders among the study population

Psychiatric disorders (ICD-10)	N	%
Depressive disorder (F32)	101	33.7
Somatoform disorder (F45)	47	15.7
Anxiety disorder (F41)	39	13.0
Dementia (F00)	37	12.3
Alcohol dependent syndrome (F10)	25	8.3
Psychosis NOS (F29)	11	3.7
Bipolar affective disorder (F31)	9	3.0
Mixed anxiety depression (F41.2)	7	2.3
Seizure disorder (G40)	5	1.7
Dysthymia (F34)	4	1.3
Schizophrenia (F20)	3	1.0
Delirium (F05)	2	0.7
Organic psychotic depression (F09)	2	0.7
Post-traumatic stress disorder (F43.10)	2	0.7
Migraine (G43)	1	0.3
Mixed headache (G44)	1	0.3
Psychiatric disorder not mentioned elsewhere (F99)	1	0.3
Delusional disorder (F22)	1	0.3
Sleep disorder (G47)	1	0.3
Adjustment disorder (F43.20)	1	0.3
Total	N = 300	100

Table 2. Relationship between age group and psychiatric disorders

Psychiatric disorders (ICD-10)	Age groups		OR	95% CI
	≤ 75 years (N=229)	> 75 years ≤ 75 years / >75 years (N=71)		
Adjustment disorder (F43.20)	1	0	.000	(.000 - .000)
ADS (F10)	25	0	.000	(.000 - .000)
Anxiety disorder (F41)	30	9	2.050	(.65 - 6.38)
BPAD (F31)	7	2	1.952	(.33 - 11.69)
Delirium (F05)	1	1	6.833	(.38 - 124.34)
Delusional disorder (F22)	1	0	.000	(.000 - .000)
Dementia (F00)	15	22	10.022	(3.41 - 29.49)
Depressive disorder (F32)	73	28	2.261	(1.00 - 6.85)
Dysthymia (F34)	4	0	.000	(.000 - .000)
Migraine (G43)	1	0	.000	(.000 - .000)
Mixed anxiety depression (F41.2)	6	1	1.139	(0.12 - 11.18)
Mixed headache (G44)	1	0	.000	(.000 - .000)
Organic psychotic depression (F09)	2	0	.000	(.000 - .000)
Post-traumatic stress disorder (F43.10)	2	0	.000	(.000;.000)
Psychiatric disorder not mentioned elsewhere (F99)	1	0	.000	(.000;.000)
Psychosis NOS (F29)	9	2	1.159	(.26 - 8.79)
Schizophrenia (F20)	3	0	.000	(.000 - .000)
Seizure disorder (G40)	5	0	.000	(.000 - .000)
Sleep disorder (G47)	1	0	.000	(.000 - .000)
Somatoform disorder (F45)	41	6	.146	(.000 - .000)

The distribution of psychiatric disorders was further analyzed in two different subgroups created by age and gender. First group was patients of age up to 75 years and the second group was patients above 75 years of age. Among patients younger than 75 years of age, 133 (58.1%) were females and 96 (41.9%) were males making a total of 229 in that group. Total of 46 (64.8%) female patients and 25 (35.2%) male patients comprised the 71 patients included in older than 75 years of age group. The relationship between age group and psychiatric disorders is shown in Table 2 and the relationship between gender and psychiatric disorders is shown in Table 3.

Table 3. Relationship between gender and psychiatric disorders

Psychiatric disorders (ICD-10)	Gender		OR	95% CI
	F (n=179)	M (n=121)		
Adjustment disorder (F43.20)	1	0	.000	(.000 - .000)
ADS (F10)	4	21	17.183	(4.85 - 60.85)
Anxiety disorder (F41)	26	13	1.636	(.63 - 4.22)
BPAD (F31)	1	8	26.182	(2.94 - 232.95)
Delirium (F05)	2	0	.000	(.000 - .000)
Delusional disorder (F22)	0	1	5287008577	(.000 - .000)
Dementia (F00)	24	13	1.773	(.68 - 4.61)
Depressive disorder(F32)	62	39	2.059	(.94 - 4.51)
Dysthymia (F34)	4	0	.000	(.000 - .000)
Migraine (G43)	1	0	.000	(.000 - .000)
Mixed anxiety depression (F41.2)	5	2	1.309	(.22 - 7.71)
Mixed headache (G44)	0	1	5287008577	(.000 - .000)
Organic psychotic depression (F09)	1	1	3.273	(.19 - 56.74)
Post-traumatic stress disorder (F43.10)	1	1	3.273	(.19 - 56.74)
Psychiatric disorder not mentioned elsewhere (F99)	1	0	.000	(.000 - .000)
Psychosis NOS (F29)	6	5	2.727	(.69 - 10.68)
Schizophrenia (F20)	2	1	1.636	(.14 - 19.81)
Seizure disorder (G40)	2	3	4.909	(.73 - 33.23)
Sleep disorder (G47)	0	1	5287008577	(.000 - .000)
Somatiform disorder (F45)	36	11	.306	(.000 - .000)

DISCUSSION

Current study was carried out with the aim of estimating the prevalence of various mental and behavioral disorders in the elderly patients visiting the psychiatric OPD of a tertiary care center. It further aimed to analyze whether there were any age or gender specific differences in psychiatric morbidity in these patients.

In the current study organic including symptomatic mental disorders was found in 13.66% of the patients. Dementia (12.3%) was the most common diagnosis followed by delirium (0.7%) and organic psychotic depression (0.7%). Similar findings have been reported from other parts of Nepal.⁷⁻⁹ However, delirium was more frequent than dementia

in one of the studies, which may have been due to sampling technique.⁹ The risk of having dementia increased with increase in age [OR = 10.02, 95% CI = 3.41 - 29.49]. This finding was expected and in accordance to previous studies.⁴ Dementia was more frequent in females in our study. This finding is in accordance to expectation as dementia is usually found to be more prevalent in older women even after adjusting for their longer survival.¹⁰

Previous studies from Nepal have reported alcohol dependence syndrome in 5% in elderly patients, and alcohol related disorders in 14%.^{7,11} Similar high prevalence of alcohol related problems (8.3%) was found in our study. Alcohol related problems were more in males and younger subgroup, which was similar to findings reported earlier.¹² The decrease in prevalence of alcohol related disorders with increasing age may in part be due to maturing out of subjects or selective mortality.¹³ Part of this might also be due to under reporting of substance related problem by older adults or under detection by physicians.¹⁴

Schizophrenia and related psychotic disorders was present in 5% of our sample which is similar to the earlier finding of 6% from Nepal.⁷ Rates of schizophrenia more than our study has been reported from India and other parts of the world.^{15,16} Schizophrenia and related psychotic disorders were equal in both sexes and odds did not differ in different age subgroups of our study. Though the prevalence of psychotic symptoms tends to increase with age, this is not true for primary psychosis. Slightly higher prevalence in females is expected as late onset schizophrenia is more common in them.¹⁷

Depressive symptoms are no more frequent in elderly when compared with young adults, though some studies suggest that it may be due to bias by selective mortality and difficulty in case finding.^{18,19} When factors like more physical disability, higher proportion of females, more cognitive impairment are controlled for there was no relationship between age and depressive symptoms.²⁰ In the current study the odds of having depressive disorder was higher in females and younger subgroup of the elderly patient.

The prevalence of bipolar affective disorder (BPAD) in outpatients was estimated to be 6.1% (SD=1.5).²¹ The overall prevalence was lower (3%) in current study. Male preponderance was seen in current study, which may be due to increase in late onset mania in males.²²

Although anxiety disorders are less common in elderly when compared to young adults, they are highly prevalent in this population.²³ Among elderly patients the prevalence seems to be lesser in old subgroup and males.^{24,25} Similar pattern was observed in current study with odd of suffering from anxiety disorder being more in younger subgroup and females.

Somatoform disorder was seen in 15.7% of our sample. The rate is in accordance to that reported previously⁷ as expected the prevalence was higher in females.

The findings of the study must be interpreted against the background of its limitations. Its retrospective design and small size are the two most limitations. A prospectively designed study using the structured or semi-structured questionnaires would help eliminate the interviewer bias. Subgroup analysis of this study was particularly hampered by the small sample size of the study as comparisons could not be done for several disorders. Even in cases where comparisons were feasible the confidence intervals obtained were wide; limiting the confidence in our findings. It is also important to note that the use of standard diagnostic manuals like ICD may underestimate the prevalence of psychiatric disorders in older population because they have not been validated in this population. As the knowledge base of psychiatric disorders in the elderly increases age specific diagnostic criteria may be available in the future. The strength of this study lays in the fact that it is the first study done in this part of Nepal which has tried to explore the relationship of age and gender with psychiatric morbidity in elderly patients.

CONCLUSION

Depressive disorder was the most common psychiatric disorder followed by somatoform disorder in elderly patients above 65 years of age. The risk of having dementia was significantly increased in patients with age group above 75 years. Alcohol dependence syndrome was common in males whereas dementia was common in females. The odds of male patient suffering from various psychiatric disorder was around half when compared to females.

CONFLICT OF INTEREST

None

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