



Psychiatric Morbidity in Elderly Patients Attending OPD of Lumbini Medical College and Teaching Hospital

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Abstract: Context: The number of geropsychiatric patients is increasing but sufficient work has not been done in this area of Nepal. Aims: 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. Settings and Design: Retrospective review; Psychiatric outpatient department of Lumbini Medical College and Teaching Hospital, Palpa, Nepal. Material and Methods: Data for Patients >65 years of age attending the psychiatric outpatient department of Lumbini Medical College and Teaching Hospital, Palpa, Nepal, from 1st April 2018 to 31st March 2019 were collected retrospectively in a predesigned proforma. Statistical Analysis Used: Risks of having different psychiatric disorders was estimated using odds ratio. Results: The mean age of study group was 71.49 (S. D=6.99; range=28). 59.7% of the patients (no=179) were female and 40.3% of the patients (n=121) were male. Depressive disorder (33.7%) was the most common diagnosis. In the current study the odds of having depressive disorder was higher in females and younger subgroup of the elderly patient. 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%). The risk of having dementia increased with increase in age [OR (<=75yrs/>75yrs)=10.022, 95%CI=3.406; 29.486]. High prevalence of alcohol related problems (8.3%) was found in our study. Alcohol related problems were more in males and younger subgroup. The prevalence of bipolar affective disorder (BPAD) in outpatients was estimated to be 6.1% (SD=1.5). Conclusions: Depressive disorder was the most common psychiatric disorder (33.7%) followed by somatoform disorder (15.7%). The risk of having dementia was increased in older age group which was statistically significant. As for gender, alcohol dependence syndrome was found to be more common in males whereas dementia was found to be more common in females. The odds of male patient suffering from depression, anxiety, mixed anxiety depression, somatoform disorder was around half when compared to females.

Keywords: Geropsychiatric, Psychiatric Morbidities, Gender

1. 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 gero-psychiatry has increased because of the growth in size of the elderly population. The

large geriatric population has an equally high psychiatric morbidity. 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, [6-8], however, none has focused on age and gender specific differences. This study is designed to fulfill this research gap.

2. Materials and Methods

A retrospective review of departmental records from 1st April 2018 to 31st March 2019 was carried out. Data regarding age, gender and diagnosis of all the patients >65 yrs of age visiting the out patient department (OPD) of psychiatry, Lumbini Medical College and Teaching Hospital, Palpa, Nepal, were collected. All patients were diagnosed by consultant psychiatrist using International Classification of Disease (ICD-10) criteria. Out of the total patients who visited OPD of Psychiatric department in the study period; 300 were new cases of age 65 years or older. Data from all the patients included in the study was entered in SPSS version 20.0. After analyzing the data for demographic and clinical profiles, the risk of having different psychiatric illness was estimated using odds ratio (OR). Different psychiatric diagnoses were treated as dependent variables; age and gender were treated as independent variable.

3. Results

The mean age of study group was 71.49 (S. D=6.99; range=28). 59.7% of the patients (n=179) were female and 40.3% of the patients (n=121) were male. The clinical profile of the study population is shown in Table 1.

Table 1. Distribution of psychiatric disorders among the study population.

Psychiatric disorders	Frequency (N)	Percent (%)
Adjustment disorder	1	.3
ADS	25	8.3
Anxiety Disorder	39	13.0
BPAD	9	3.0
Delirium	2	.7
Delusional disorder	1	.3
Dementia	37	12.3
Depressive Disorder	101	33.7
Dysthymia	4	1.3
Migraine	1	.3
Mixed anxiety depression	7	2.3
Mixed Headache	1	.3
Organic Psychotic Depression	2	.7
Post Traumatic Stress Disorder	2	.7
Psychiatric disorder not mentioned elsewhere	1	.3
Psychosis NOS	11	3.7
Schizophrenia	3	1.0
Seizure Disorder	5	1.7
Sleep Disorder	1	.3
Somatoform Disorder	47	15.7
Total	300	100.0

The distribution of psychiatric disorders was further analyzed in two different subgroups created by age (≤ 75 years and >75 years) and gender (female and male). 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 2. Relationship between age group and psychiatric disorders.

Psychiatric disorders	Age groups		Odds Ratio for age groups (≤ 75 years/ >75 years)	95% confidence interval
	≤ 75 years (N=229)	> 75 years (N=71)		
Adjustment disorder	1	0	.000	(.000;.000)
ADS	25	0	.000	(.000;.000)
Anxiety Disorder	30	9	2.050	(.659; 6.380)
BPAD	7	2	1.952	(.326; 11.692)
Delirium	1	1	6.833	(.376; 124.337)
Delusional disorder	1	0	.000	(.000;.000)
Dementia	15	22	10.022	(3.406; 29.486)
Depressive Disorder	73	28	2.261	(1.002; 6.853)
Dysthymia	4	0	.000	(.000;.000)
Migraine	1	0	.000	(.000;.000)
Mixed anxiety depression	6	1	1.139	(.116; 11.177)
Mixed Headache	1	0	.000	(.000;.000)
Organic Psychotic Depression	2	0	.000	(.000;.000)
Post Traumatic Stress Disorder	2	0	.000	(.000;.000)
Psychiatric disorder not mentioned elsewhere	1	0	.000	(.000;.000)
Psychosis NOS	9	2	1.159	(.262; 8.786)
Schizophrenia	3	0	.000	(.000;.000)
Seizure Disorder	5	0	.000	(.000;.000)
Sleep Disorder	1	0	.000	(.000;.000)
Somatoform Disorder	41	6	.146	(.000;.000)

Table 3. Relationship between gender and psychiatric disorders.

Psychiatric disorders	Gender		Odds ratio for age groups	95% confidence interval
	F (N=179)	M (N=121)	Female/Male	
Adjustment disorder	1	0	.000	(000; 000)
ADS	4	21	17.183	(4.851; 60.853)
Anxiety Disorder	26	13	1.636	(634; 4.224)
BPAD	1	8	26.182	(2.943; 232.952)
Delirium	2	0	.000	(000; 000)
Delusional disorder	0	1	5287008577	(000;.000)
Dementia	24	13	1.773	(682; 4.605)
Depressive Disorder	62	39	2.059	(939; 4.514)
Dysthymia	4	0	.000	(000; 000)
Migraine	1	0	.000	(000;.000)
Mixed anxiety depression	5	2	1.309	(222; 7.712)
Mixed Headache	0	1	5287008577	(000; 000)
Organic Psychotic Depression	1	1	3.273	(189; 56.741)
Post Traumatic Stress Disorder	1	1	3.273	(189; 56.741)
Psychiatric disorder not mentioned elsewhere	1	0	.000	(000; 000)
Psychosis NOS	6	5	2.727	(696; 10.684)
Schizophrenia	2	1	1.636	(135; 19.808)
Seizure Disorder	2	3	4.909	(725; 33.230)
Sleep Disorder	0	1	5287008577	(000; 000)
Somatoform Disorder	36	11	.306	(000; 000)

4. Discussion

Current study was carried out with the aim of estimating the prevalence of various mental and behavioural 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, [9] which may have been due to sampling technique. The risk of having dementia increased with increase in age [OR (≤ 75 yrs/ > 75 yrs)=10.022, 95%CI=3.406; 29.486]. 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, [11] and alcohol related disorders in 14%. [7] 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 have 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 tend 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, [18, 19] though some studies suggest that it may be due to bias by selective mortality and difficulty in case finding. [18] When factors like more physical disability, higher proportion of females, more cognitive impairment were 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, [23] they are highly prevalent in this population. 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 previously. [7] As expected the prevalence was higher in females.

The findings of the study have to 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.

5. Conclusion

Depressive disorder was the most common psychiatric disorder (33.7%) followed by somatoform disorder (15.7%). The risk of having dementia was increased in older age group which was statistically significant. As for gender, alcohol dependence syndrome was found to be more common in males whereas dementia was found to be more common in females. The odds of male patient suffering from depression, anxiety, mixed anxiety depression, somatoform disorder was around half when compared to females.

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