

Original Research

To determine the Psychiatric Morbidity in Geriatric in patients with Medical Disorders

¹Tanu Singh, ²Shiv Shankar Rai

¹Assistant Professor, Department of Psychiatry, Narayan Medical College, Sasaram, Bihar, India;

²Assistant Professor, Department of General Medicine, Narayan Medical College, Sasaram, Bihar, India

ABSTRACT:

Aim: To determine the Psychiatric Morbidity in Geriatric in patients with Medical Disorders **Material and methods:** The sample for the research comprised of 100 consecutive geriatric inpatients admitted to medical wards above the age of 65. MINI Plus was used to test the patients for mental illnesses. In individuals who tested positive for MINI Plus, the Comprehensive Psychopathology Rating Scale (CPRS) was employed to measure the degree of psychopathology. **Results:** The mean age in group was 70.55 ±3.58 years and 66.25± 2.69 years in group 2. The geriatric inpatient group had more patients with hypertension (44%) compared to 11% in non-geriatric controls. Similarly, respiratory conditions were seen in 44% and 18% in group 1 and 2 respectively, cardiovascular conditions in 31 % and 6 % in group 1 & 2 respectively. In group1, 16% had neoplasm compared to only 2 % in group 2. Infections were diagnosed significantly more in group 2 (62 %) compared to 32% in group 1. No significant differences seen with respect to other medical diagnoses were seen between the groups. Among the patients in group 1, 25% had a DCR-10 psychiatric diagnosis obtained using MINI Plus. In group 2, 28 (28%) had a psychiatric diagnosis. No statistical difference seen. Group 1 included five patients with Alzheimer's disease, one with multi-infarct dementia, and one with organic delusional illness. These diagnoses were not found in any of the patients in Group 2. Alcohol dependency syndrome was found in 12% of patients in Group 2 and 2% of patients in Group 1. Mild depressive episodes and dysthymia were identified equally in both groups. Anxiety disorder was identified in 3% and 2% of the people in groups 1 and 2, respectively. There was no significant difference in mental morbidity between the two groups. **Conclusion:** The present study concludes that elderly individuals with medical diseases had significantly higher rates of psychopathology, cognitive impairment, and functional decline compared to adults with medical disorders and the general population.

Keywords: Psychiatric Morbidity, Geriatric, Medical Disorders

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Corresponding author: Tanu Singh, Assistant Professor, Department of Psychiatry, Narayan Medical College, Sasaram, Bihar, India

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INTRODUCTION

Professionals in the domains of geriatric psychiatry and geriatric medicine are considered experts in their respective disciplines. Simply as toddlers are not thought to be little adults, so too must the elderly be seen as more than just their chronological age. Their therapy must account for the substantial biopsychosocial differences between individuals. For instance, geriatric patients have unique challenges due to increased socioeconomic stresses associated with ageing, such as retirement, loss of a loved one, and financial difficulties, as well as increased biological variability and increased physical and cognitive comorbidity. Therapeutic pessimism (and even nihilism) is generated by pervasive ageism and

nihilism in both society and the medical community, exacerbating the aforementioned problems. ¹ In many ways, modern medicine may learn from the successes of geriatric psychiatry. In order to effectively address the many evaluation and treatment challenges at hand, a multidisciplinary strategy is required. After all, the elderly are disproportionately represented among those who suffer from many chronic diseases, use multiple medications, and have considerable limitations (vision, hearing, mobility, cognition, finances).

Aging doesn't have to be seen as a terrible part of life full of degeneration and widespread sickness. The effects of becoming older are often confused with the typical but not inevitable outcomes of other health

issues. In this way, medical morbidity increases with age, but many physical ailments can be controlled more effectively than in the past, and some (like dietary deficiencies) can be avoided entirely. However, it has been shown that the specialised treatment of multiple physical problems by different specialists, resulting in polypharmacy, has a negative impact on the treatment of mental disorders in the elderly.² Psychosocial issues, such as financial hardship and a lack of suitable community services, may have a significant impact on the success of mental health therapies for older people with psychiatric symptoms. The quality of human life in old age is significantly influenced by factors such as access to quality health care, social respect for the elderly, and the perception of old age as a good phase of life. There is a chance that in the future, the manifestation and treatment of mental illnesses may be affected by age and age-related disorders (such as metabolic and vascular diseases). Although this is the case, the elderly are often overlooked in psychiatric epidemiology research.^{3,4} The widespread idea that elderly people seldom have mental health issues is false. Study after study, including the National Institute of Mental Health's Epidemiologic Catchment Area (ECA) study from the 1980s, shows that this misconception is common even among non-geriatric mental health experts. The ECA survey found that 13% of the population aged 65 and older and meets diagnostic criteria for mental disorders other than dementia. This number is likely to be grossly underestimated for a number of reasons, including forgetfulness and social stigma, the fact that psychiatric symptoms are often misattributed (by patients, caregivers, and raters) to other causes, like cognitive impairment, physical disorders, or "normal ageing," and a lack of age-appropriate diagnostic criteria for major psychiatric disorders, like substance abuse or dependence. It is estimated that the "actual" prevalence of mental disorders other than dementia among the elderly is at least 25% higher, or more than 16%. Because of this, more than 10% of the elderly population has dementia, most often Alzheimer's disease; neuropsychiatric behavioural disturbances are common in patients suffering from dementia, with about 3% of the total elderly population displaying psychotic and/or depressive symptoms at any given time. This translates to roughly 20% of the 65+ population displaying clinically significant psychopathological symptoms. This does not include

the large proportion of the elderly population that experiences delirium and other "mental disorders related to general medical problems" [DSM-IV].^{5,6} The lack of readily available psychiatric expertise in geriatric medical settings is a major contributor to the failure to identify and treat psychiatric illnesses. Patients over the age of 65 who are experiencing multiple medical problems may benefit greatly from a collaborative care model because they are less likely to seek treatment at separate psychiatric clinics or because their care needs to include a thorough evaluation of both their physical and mental health.⁶ Despite this, there is a dearth of written material on the subject. Unfortunately, the present researcher was unable to find any published studies that examined the prevalence of mental morbidity in adult and geriatric inpatients with the same underlying medical conditions. The purpose of this research was to see whether mental morbidity was different in geriatric inpatients with medical illnesses compared to adult inpatients with medical disorders.

MATERIAL AND METHODS

After receiving ethical approval from the institution, this research was conducted. The sample for the research comprised of 100 consecutive geriatric inpatients admitted to medical wards above the age of 65. The research excluded patients who were unconscious, critically or terminally sick in the intensive care unit, and had a history of main mental illnesses.

The control group consisted of 100 consecutive adult consenting patients admitted to medical wards.

METHODOLOGY

After discussing the goal and design of the investigation, all participants and controls recruited for the study provided written informed permission for participation in the study. The socio-demographic and clinical characteristics were entered in a study-specific proforma. MINI Plus was used to test the patients for mental illnesses. In individuals who tested positive for MINI Plus, the Comprehensive Psychopathology Rating Scale (CPRS) was employed to measure the degree of psychopathology. The Mini Mental State Examination (MMSE), Clock Drawing Test (CDT), and Trail Making Test B were used to test cognitive processes (TMT-B). The Bristol Activities of Daily Living Scale was used to assess functional status.

RESULTS

The mean age in group was 70.55 ± 3.58 years and 66.25 ± 2.69 years in group 2.

Table 1: Age distribution

Age	Group 1		Group 2	
	n	%	n	%
below 65	0	0	35	35
65-75 yrs.	65	65	45	45
75-85	25	25	20	20
above 85	10	10	-	-

There is no significant difference in gender between the two groups. ($\chi^2=0.65$; $p>0.05$). There is very highly significant difference in duration of medical illness between the two groups ($\chi^2=68.52$; $p<0.001$). 40 percent of the geriatric inpatients had duration of

medical illness of 6- 10 years compared to 20 % of non-geriatric adult controls. 40 percent of the geriatric inpatients had duration of medical illness of more than 10 years compared to 10 % of controls.

Table 2: Medical diagnoses

Medical Diagnoses	Group 1		Group 2	
	n	%	n	%
Gynecological	1	1	0	0
Diabetes mellitus	32	32	21	21
Hypertension	44	44	11	11
Respiratory	44	44	18	18
Others	41	41	26	26
Neurological	12	12	2	2
Cardiovascular	31	31	6	6
Neoplasms	16	16	2	2
Genitourinary	14	14	0	0
Arthritis	2	2	7	7
Endocrinal	1	1	2	2
Infections	36	36	62	62

Some very highly significant differences between the two groups were noted in terms of nature medical diagnoses. The geriatric inpatient group had more patients with hypertension (44 %) compared to 11% in non-geriatric controls ($\chi^2=14.69$; $p<0.001$). Similarly, respiratory conditions were seen in 44% and 18% in group 1 and 2 respectively ($\chi^2=12.77$; $p<0.001$); cardiovascular conditions in 31 % and 6 %

in group 1 & 2 respectively ($\chi^2=11.37$; $p<0.001$). In group1, 16% had neoplasm compared to only 2 % in group 2 ($\chi^2=5.87$; $p<0.05$). Infections were diagnosed significantly more in group 2 (62 %) compared to 32% in group 1 ($\chi^2=7.34$; $p<0.05$). No significant differences seen with respect to other medical diagnoses were seen between the groups.

Table 3: Frequency of psychiatric diagnosis

MINI Plus diagnosis	Group 1		Group 2	
	n	%	n	%
Present	25	25	28	28
Absent	75	75	72	72

Among the patients in group 1, 25% had a DCR-10 psychiatric diagnosis obtained using MINI Plus. In group 2, 28 (28%) had a psychiatric diagnosis. No statistical difference seen ($\chi^2=0.11$; $p>0.05$).

Table 4: Nature of psychiatric morbidity

MINI Plus Diagnoses	Group 1		Group 2	
	N	%	n	%
Alzheimer's disease	5	5	0	0
Multi-infarct dementia	1	1	0	0
Alcohol dependence syndrome	2	2	12	12
Mild depressive episode	3	3	3	3
Moderate depression without somatic syndrome	3	3	3	3
Dysthymia	5	5	4	4
Anxiety disorder unspecified	3	3	2	2
Adjustment disorder; brief depressive reaction	2	2	4	4
Organic delusional disorder	1	1	0	0

Group 1 included five patients with Alzheimer's disease, one with multi-infarct dementia, and one with organic delusional illness. These diagnoses were not found in any of the patients in Group 2. Alcohol dependency syndrome was found in 12% of patients in Group 2 and 2% of patients in Group 1. Mild

depressive episodes and dysthymia were identified equally in both groups. Anxiety disorder was identified in 3% and 2% of the people in groups 1 and 2, respectively. There was no significant difference in mental morbidity between the two groups.

Table 5: Comparison of MMSE scores

	Groups	Mean	p
MMSE Score	Group 1	25.63±2.66	P<0.001
	Group 2	27.89±2.31	

A very highly significant difference was noted with respect to MMSE scores between the two groups. Patients in group 1 had lower MMSE scores compared to patients in group 2.

Table 6: Comparison of clock drawing test in study groups

	Groups	Mean	p
Clock drawing test	Group 1	4.11	P<0.001
	Group 2	4.01	

With respect to clock drawing test, a very highly significant difference was noted between the two groups. The mean score in group 1 was lower than group 2.

Table 7: TMT-B

TMT-B	Groups	Mean	p
Total time (seconds)	Group 1	211±7.84	<0.001
	Group 2	145±5.69	
Errors	Group 1	2.41±0.15	p<0.001
	Group 2	1.31±0.09	

A very highly significant difference was seen in terms of total time taken and number of errors committed in the two groups. The geriatric group took longer time and made more errors than the control group. There was a significant difference in terms of duration of medical illness in those with psychiatric morbidity in the geriatric group. Thirty-two elderly patients with more than 5 years duration of medical illness had psychiatric diagnosis ($\chi^2=4.85$; $p=0.04$). No significant difference was noted in control group with respect to the same ($\chi^2=2.41$; $p=.044$).

DISCUSSION

In terms of sex, religion, caste, home, work, family makeup, and socioeconomic status, there is little to no difference between the two groups. This suggests that, with respect to these metrics, the two groups are equivalent. Sixty-five percent of patients in group 1 were senior citizens between the ages of 65 and 75. This is within the age range seen in similar research. Among the studies that reported a prevalence between 60 and 69 years old, ² Nandi et al.³, Prasad et al.⁴ and Tiwari and Srivastava ⁵all found similar results: 87.6%, 74%, and 59.70%, respectively.

The difference between the two groups in terms of medical sickness duration is statistically significant ($p<0.001$). Medical conditions lasting 6-10 years were more common among geriatric inpatients (40%) than among non-geriatric adult controls (20%). Among the elderly hospitalised, 40% had a medical condition for more than 10 years, whereas only 10% of the controls did. rate that is consistent with that found by other investigations.⁶⁻⁸

According to the literature, which was evaluated by Valders and colleagues, comorbidity is linked to worse health outcomes, more complicated clinical treatment, and higher healthcare expenditures.⁹ Hypertension was more common in the elderly hospitalised group (44% vs. 11%). Furthermore, 44%

and 18% of group 1 and 2 participants suffered from respiratory disorders, whereas 31% and 6% of group 1 and 2 participants suffered from cardiovascular diseases. Nyloma was found in 16% of group1 and just 2% of group2. Significantly more infections were identified in group 2 (62%) than in group 1 (32%). There were no statistically significant differences between the groups in terms of any other medical diagnosis. Hypertension has been considered by several studies as the most prevalent health issue. 9 Researchers found that the most prevalent physical diagnoses were for osteoarthritis, cancer, vision loss, and cardiovascular illness. The results of the current investigation are consistent with those of previous studies.^{6,10,11} In terms of respiratory disorders, hypertension, cardiovascular diseases, and neoplasms, the groups were shown to be statistically and clinically significantly different from one another. There were no statistically significant differences between the groups with regard to the prevalence of diabetes mellitus or any other medical disorders. The non-elderly population had a much higher rate of infection diagnoses.

What makes this research stand out is that the investigator compared the prevalence of mental illness among medically unwell elderly patients to that of similarly ill adult individuals. This research found a non-significant 25% prevalence of mental comorbidity in the geriatric group and a 28% rate in the non-geriatric group 2. In comparison to the prevalence seen in the vast majority of worldwide research (35.5-63%), this frequency is somewhat lower.¹² Prevalence estimates from India range from 35% to 49%, which is in line with those from Unützer and Borson. 6 Distinct cultural and geographical contexts account for these significant disparities. The prevalence of mental problems was found to be as high as 33 and 42 percent in rural populations by Nandi et al.¹³ and Tiwari et al.⁵, respectively.

Alzheimer's disease was the diagnosis for 5 individuals in group 1, while multi-infarct dementia accounted for 1 and organic delusion disorder was the cause of confusion for 1 more. Previous field studies indicated that the overall prevalence of dementia in India was low.¹⁴ Psychopathology (psychiatric and psychological symptoms not satisfying criteria for DCR-10 diagnosis) was more common and more severe in the elderly than in the younger individuals in this research. The rising rates of both dementia and depression that come with advancing age may be to blame. Complications from physical sickness and sensory impairments, as well as the prevalence of organic psychological illnesses, all rise with age. Total CPRS scores, as well as reported and observed CPRS scores, showed significantly significant variation. Patients often experience feelings of sorrow, inner tension, stress about trivial matters, fatigue, lassitude, trouble concentrating, memory loss, sleep disturbances, and a lack of sexual attraction. Common signs include outward displays of sorrow, irritability, sluggishness, and distraction. Medically unwell people regularly have depressive symptoms and syndromes, however these conditions are often misdiagnosed or neglected.¹⁵

The current research is a cross-sectional case-control analysis of the prevalence of mental morbidity and cognitive impairment in older persons with medical diseases compared to a control group of non-geriatric adults. There is a single evaluation of the topics. The instruments included in this analysis have been standardised and shown high levels of reliability and validity in prior research. Reliability and validity are improved since all the instruments are simple to use, quick to administer, and comfortable for the patients. Assessments of cognitive abilities have dubious validity. Due to the nature of the research, rater bias is conceivable since the evaluation is not blind. Although DCR-10 was utilised to determine psychiatric diagnoses, the current researcher employed a systematic clinical interview to evaluate mental health problems. This research aimed to examine the connection between mental diagnoses and certain diseases. However, statistical conclusions cannot be drawn due to the low prevalence of mental diseases in both the sample and controls.

CONCLUSION

The present study concludes that elderly individuals with medical diseases had significantly higher rates of psychopathology, cognitive impairment, and

functional decline compared to adults with medical disorders and the general population.

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