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Expert Opinion Article

Psychiatric Morbidity Among Patients Attending a Geriatric Clinic in a Tertiary Care Centre

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Abstract

Background: Population ageing is increasing rapidly in India, leading to a growing burden of chronic medical illnesses and psychiatric disorders. Psychiatric morbidity in the elderly significantly impacts quality of life and functional independence, yet remains under-recognized in general medical settings.

Objectives:

1. To estimate the prevalence of psychiatric morbidity among elderly patients attending a geriatric clinic.
2. To identify socio-demographic and clinical factors associated with psychiatric morbidity.

Methods: A hospital-based cross-sectional study was conducted among 275 elderly patients aged ≥60 years. Psychiatric diagnoses were assessed using MINI-PLUS. Cognitive function, depression, functional ability, vascular component, and stress were assessed using HMSE, GDS-15, EASI, Hachinski Ischemic Score, and Perceived Stress Scale respectively. Statistical analysis was performed using SPSS v24.

Results: Psychiatric morbidity was present in 62.9% of participants. Depression (23.6%) was the most common disorder, followed by cognitive impairment (11.3%). Depression showed significant associations with increasing age (p=0.008), lower education (p=0.047), visual impairment (p=0.027), and higher perceived stress (p=0.0001).

Conclusion: Psychiatric morbidity is highly prevalent among geriatric patients. Routine screening and integration of mental health services into geriatric care are essential.

Keywords: Geriatric psychiatry, Depression, Cognitive impairment, Elderly

Introduction

Ageing is a universal biological process characterized by progressive decline in physiological function and increased vulnerability to disease[1]. The global demographic shift toward an ageing population, often referred to as the "greying of the world," poses significant challenges to healthcare systems[2].

In India, the proportion of elderly individuals has steadily increased over recent decades[3]. This demographic transition is accompanied by an increased prevalence of chronic non-communicable diseases and psychiatric disorders[4].

Psychiatric morbidity in the elderly is influenced by biological, psychological, and social factors including chronic illness, sensory impairment, and social isolation[5]. Depression and cognitive impairment are among the most common psychiatric conditions in this population[6].

Despite their high prevalence, psychiatric disorders in elderly patients are often underdiagnosed in general medical settings due to atypical presentations and lack of routine screening[7].

This study was undertaken to assess the prevalence and correlates of psychiatric morbidity among elderly patients attending a geriatric clinic in a tertiary care centre.

Objectives

1. To evaluate the prevalence of psychiatric morbidity among geriatric patients.
2. To assess socio-demographic and clinical factors associated with psychiatric morbidity.

Materials and Methods

Study Design: Cross-sectional study
Setting: Geriatric clinic of a tertiary care hospital
Sample Size: 275 elderly patients

Inclusion Criteria:
* Age ≥60 years
* Informed consent

Exclusion Criteria:
* Severe illness impairing participation

* Refusal to consent

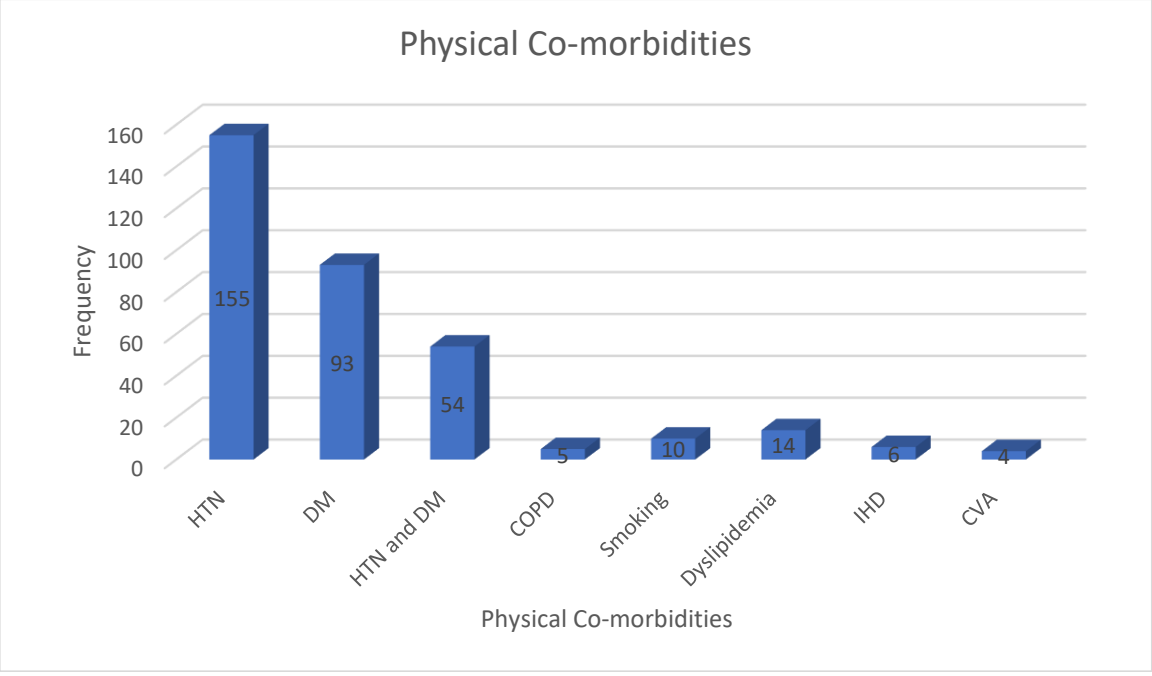
Assessment Tools:
* MINI-PLUS[12]
* HMSE[10]
* GDS-15[11]
* EASI[5]
* Hachinski Ischemic Score[13]
* Perceived Stress Scale[14]

Statistical Analysis:
Data were analyzed using SPSS version 24. Chi-square test, Fisher's exact test, and Mann–Whitney U test were applied. Statistical significance was set at $p < 0.05$.

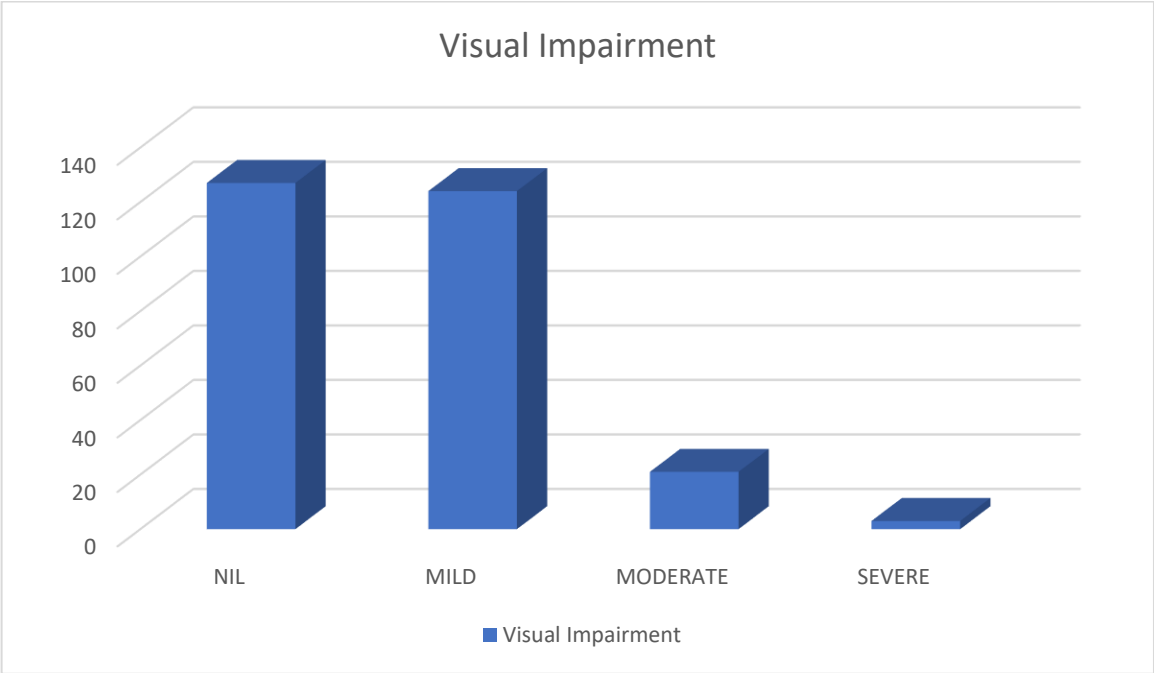
Results
1. Sociodemographic Profile
A total of 275 elderly participants were included in the study. The age ranged from 60 to 87 years, with a mean age of 67.22 ± 5.39 years.
The majority of participants were in the 65–69 years age group (39%), followed by 60–64 years (28%) and 70–74 years (23%), indicating that most attendees belonged to the early elderly age group.
Gender distribution showed a slight male predominance, with 146 males (53%) and 129 females (47%).
Most participants were from urban areas (63%), while 37% were from rural areas. Educational status revealed that 61% had less than 7 years of schooling, indicating low literacy levels. Occupationally, 51% were unemployed or housewives, reflecting economic dependency.

2. Physical Comorbidities
A high prevalence of physical illnesses was observed:
* Hypertension: 155 (56.4%)
* Diabetes mellitus: 93 (33.8%)
* Both HTN and DM: 54 (19.6%)

Other comorbidities included:
* COPD: 1.8%
* Ischemic heart disease: 2.2%
* Cerebrovascular accident: 1.5%

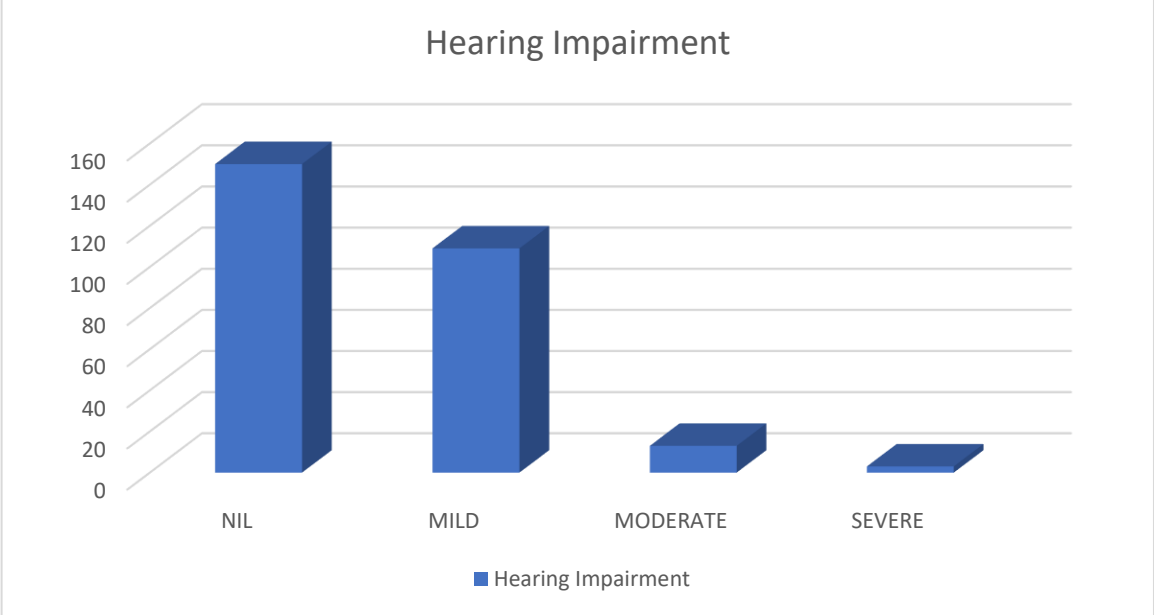


3. Sensory Impairments
*** Visual impairment: 148 (53.8%)**
  * Mild: 45.1%
  * Moderate: 7.6%
  * Severe: 1.1%



*** Hearing impairment: 125 (45.4%)**

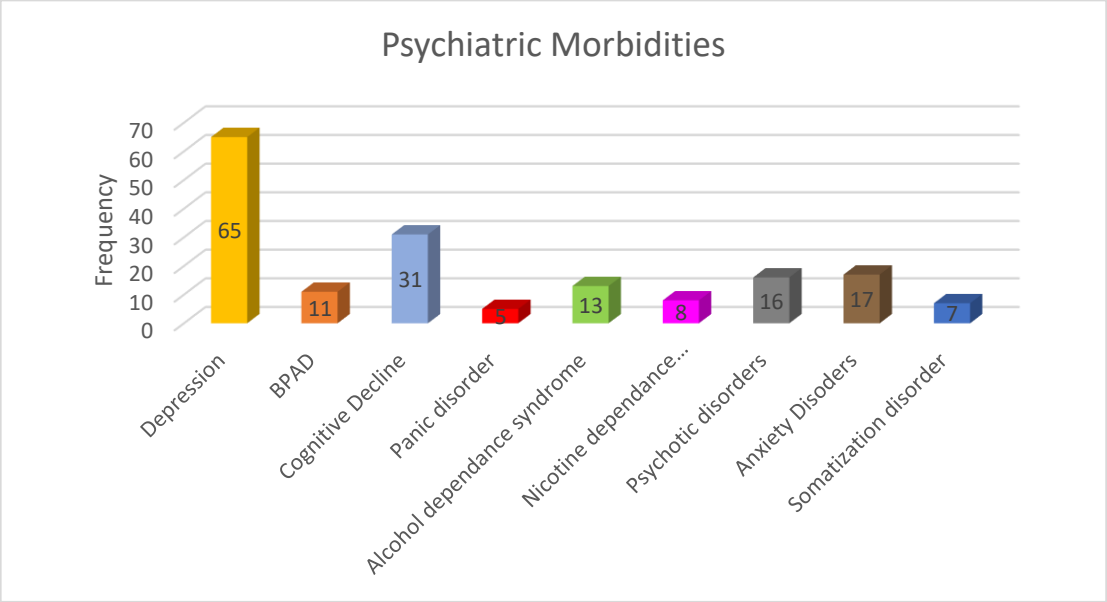
* Mild: 39.6%
* Moderate: 4.7%
* Severe: 1.09%



4. Prevalence of Psychiatric Morbidity

Out of 275 participants, 173 (62.9%) had at least one psychiatric disorder, indicating a substantial burden.
Distribution of Disorders
* Depression: 65 (23.6%)
* Cognitive impairment: 31 (11.3%)
* Anxiety disorders: 17 (6.2%)
* Psychotic disorders: 16 (5.8%)
* Alcohol dependence: 13 (4.7%)
* Bipolar disorder: 11 (4%)
* Nicotine dependence: 8 (2.9%)

* Somatization disorder: 7 (2.5%)
* Panic disorder: 5 (1.8%)



5. Association with Depression

Age

Depressed individuals had a higher mean age (68.75 ± 5.62) compared to non-depressed (66.75 ± 5.24)
→ p = 0.008 (significant)

TABLE 1: ASSOCIATION BETWEEN AGE AND DEPRESSION.

DEPRESSION	MEAN AGE	STANDARD DEVIATION(SD)	P value
PRESENT	68.75	5.624	0.008
ABSENT	66.75	5.246	

Education

Depression was significantly higher in participants with lower education
→ p = 0.047 (significant)

TABLE 2: ASSOCIATION BETWEEN EDUCATION STATUS AND DEPRESSION.

			EDUCATION STATUS			P value
			ABOVE CLASS 10	CLASS 10 AND BELOW	Total	
DEPRESSION	Absent	Count	50	160	210	0.047
		%	23.8%	76.2%	100.0%	
	Present	Count	8	57	65	
		%	12.3%	87.7%	100.0%	
Total		Count	58	217	275	
		%	21.1%	78.9%	100.0%	

Calculated using PEARSON CHI-SQUARE TEST.

Medical Comorbidities

* Hypertension → not significant (p=0.855)

TABLE 3: ASSOCIATION BETWEEN HYPERTENSION AND DEPRESSION.

			HYPERTENSION			P value
			ABSENT	PRESENT	Total	
DEPRESSION	Absent	Count	91	19	210	0.855
		%	43.3%	56.7%	100.0%	
	Present	Count	29	36	65	
		%	44.6%	55.4%	100.0%	
Total		Count	120	155	275	
		%	43.6%	56.4%	100.0%	

Calculated using PEARSON CHI-SQUARE TEST.
* **Diabetes → not significant (p=0.552)**

TABLE 4: ASSOCIATION BETWEEN DIABETES MELLITUS AND DEPRESSION.

			DIABETES MELLITUS			P value
			ABSENT	PRESENT	Total	
DEPRESSION	Absent	Count	137	73	210	0.552
		%	65.2%	34.8%	100.0%	
	Present	Count	45	20	65	
		%	69.2%	30.8%	100.0%	
Total		Count	182	93	275	
		%	66.2%	33.8%	100.0%	

Calculated using PEARSON CHI-SQUARE TEST.
* COPD → significant (p=0.012)
* IHD → highly significant (p=0.002)

Sensory Impairment
* Visual impairment → p = 0.027 (significant)

TABLE 5: ASSOCIATION BETWEEN VISUAL IMPAIRMENT AND DEPRESSION

			VISUAL IMPAIRMENT			P value
			ABSENT	PRESENT	Total	
DEPRESSION	Absent	Count	96	114	210	0.027
		%	45.7%	54.3%	100.0%	
	Present	Count	31	34	65	
		%	47.7%	52.3%	100.0%	
Total		Count	127	148	275	
		%	46.2%	53.8%	100.0%	

Calculated using PEARSON CHI-SQUARE TEST.

*** Hearing impairment → not significant**

TABLE 6: ASSOCIATION BETWEEN HEARING IMPAIRMENT AND DEPRESSION.

			HEARING IMPAIRMENT			P value
			ABSENT	PRESENT	Total	
DEPRESSION	Absent	Count	121	89	210	0.186
		%	57.9%	42.1%	100.0%	

	Present	Count	29	36	65	
		%	44.6%	55.4%	100.0%	
Total		Count	150	125	275	
		%	54.7%	45.3%	100.0%	

Calculated using PEARSON CHI-SQUARE TEST.

Stress

* Depressed: 15.05 ± 10.41
* Non-depressed: 10.37 ± 8.54
  → p = 0.0001 (highly significant)

TABLE 7: ASSOCIATION BETWEEN PSS SCORES AND DEPRESSION.

DEPRESSION	MEAN PSS SCORE	STANDARD DEVIATION(SD)	P value
PRESENT	15.05	10.412	0.0001
ABSENT	10.37	8.541	

Performed using MANN WHITNEY U TEST.

6. Cognitive Impairment

Observed in 31 (11.3%) participants, making it the second most common psychiatric condition.

TABLE 8: ASSOCIATION BETWEEN PSS SCORES AND COGNITIVE IMPAIRMENT.

COGNITIVE IMPAIRMENT	MEAN PSS SCORE	STANDARD DEVIATION(SD)	P value
PRESENT	15.71	10.93	0.002
ABSENT	8.956	9.126	

Performed using MANN WHITNEY U TEST.

Discussion

The present study demonstrates a high prevalence of psychiatric morbidity (62.9%) among elderly patients attending a geriatric clinic in a tertiary care centre. This finding underscores the substantial mental health burden in this population and highlights the importance of integrating psychiatric evaluation into routine geriatric care.

1. Overall Psychiatric Morbidity

The prevalence of psychiatric morbidity observed in this study (62.9%) is relatively higher compared to community-based studies in India, which report rates ranging from *20% to 50%*[16],[17]. However, it is consistent with other hospital-based studies, where higher prevalence is expected due to referral bias and the presence of multiple comorbidities.

This elevated prevalence can be attributed to:

* Increased healthcare-seeking behavior among symptomatic individuals
* Coexisting chronic medical illnesses
* Functional decline and dependency
* Psychosocial stressors such as loneliness and financial insecurity

Thus, geriatric clinics represent a high-risk setting for psychiatric morbidity, warranting systematic screening.

2. Pattern of Psychiatric Disorders

Depression

Depression emerged as the most common psychiatric disorder (23.6%) in the present study. This is consistent with previous Indian studies reporting prevalence rates between 20% and 25% among elderly populations[17].

The high prevalence of depression in the elderly can be explained by:

* Chronic physical illnesses
* Sensory impairments
* Loss of social roles and independence
* Bereavement and social isolation

Depression in elderly patients is often underdiagnosed, as symptoms may overlap with physical illness or be attributed to normal ageing. This highlights the need for active screening using standardized tools such as GDS.

Cognitive Impairment

Cognitive impairment was the second most common condition (11.3%), aligning with previous studies that report prevalence rates between *10% and 15%*.

Age-related neurodegenerative changes, vascular risk factors, and comorbid conditions contribute to cognitive decline. Early identification is critical, as cognitive impairment significantly affects:

* Medication adherence
* Functional independence
* Caregiver burden

Other Psychiatric Disorders

Anxiety disorders (6.2%), psychotic disorders (5.8%), and substance use disorders were also observed. Although less prevalent than depression, these conditions contribute significantly to morbidity and require clinical attention.

Substance use disorders, particularly alcohol dependence (4.7%), highlight the need for screening even in older populations, where such issues are often overlooked.

3. Sociodemographic Factors Associated with Depression

Age

A significant association was observed between increasing age and depression ($p = 0.008$). This is consistent with existing literature suggesting that advancing age increases vulnerability due to:

* Physical frailty
* Social isolation
* Accumulation of life stressors

Education

Lower educational status was significantly associated with depression ($p = 0.047$). Individuals with lower education may have:

* Reduced coping mechanisms
* Limited access to healthcare resources
* Greater socioeconomic disadvantage

This finding aligns with previous Indian studies.

Gender

No significant association between gender and depression was observed. While some studies report higher prevalence in females, others—particularly hospital-based studies—show no difference, suggesting that clinical populations may differ from community samples.

4. Medical Comorbidities and Depression

Interestingly, common conditions such as hypertension and diabetes mellitus were not significantly associated with depression, which contrasts with some previous studies.

However, strong associations were observed with:

* COPD ($p = 0.012$)
* Ischemic heart disease ($p = 0.002$)

These conditions are often associated with:

* Chronic disability
* Breathlessness and functional limitation
* Increased psychological distress

Thus, severity and functional impact of illness may be more important than mere presence of disease.

5. Sensory Impairment and Depression

A significant association was found between visual impairment and depression ($p = 0.027$).

Visual impairment leads to:

* Reduced independence
* Social withdrawal
* Increased dependency

These factors contribute to depressive symptoms. Similar findings have been reported in earlier studies.

Hearing impairment, although more prevalent among depressed individuals, did not show statistical significance. This may be due to:

* Sample size limitations
* Variability in severity

6. Role of Psychological Stress

Perceived stress was found to be strongly associated with depression ($p = 0.0001$).

Higher stress scores among depressed individuals suggest that:

* Stress acts as both a precipitating and perpetuating factor
* Elderly individuals may have reduced coping capacity

This finding highlights the importance of psychosocial interventions in geriatric care.

7. Clinical Implications

The findings of this study have important clinical implications:

* Routine psychiatric screening should be integrated into geriatric clinics
* Early detection of depression and cognitive impairment can improve outcomes
* Multidisciplinary care involving physicians, psychiatrists, and psychologists is essential
* Special attention should be given to high-risk groups:
  * Older age
  * Low education
  * Sensory impairment
  * High stress

8. Strengths of the Study

* Use of standardized diagnostic instruments (MINI-PLUS, GDS, HMSE)
* Adequate sample size (n=275)
* Comprehensive assessment including medical and psychosocial factors

9. Limitations

* Hospital-based design limits generalizability to the community
* Cross-sectional nature prevents causal inference
* Possible underreporting of psychiatric symptoms
* Lack of longitudinal follow-up

10. Future Directions

Future research should focus on:
* Longitudinal studies to establish causality
* Community-based studies for broader applicability
* Intervention-based studies to evaluate screening and treatment strategies.

Conclusion
* Psychiatric morbidity is highly prevalent
* Depression is the most common disorder
* Key factors: age, education, stress, sensory impairment
* Routine psychiatric screening is essential

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