



# Clinicopsychological Profile of Geriatrics Patient Visiting the Outpatient Department of a Tertiary Care Center of Western Uttar Pradesh: A Cross-sectional Study

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## ABSTRACT

**Background:** The geriatric population is highly vulnerable to both clinical and psychological comorbidities; the psychological health of geriatric patients remains underassessed, particularly in government outpatient department (OPD) settings where multiple chronic illnesses, low socioeconomic status, and hospitalization disrupt emotional well-being.

**Aims and objectives:** To evaluate the prevalence and association of chronic diseases with depression, anxiety, cognitive impairment, and sleep quality in elderly patients.

**Materials and methods:** A cross-sectional study was conducted on 100 patients aged  $\geq 60$  years attending the medicine OPD. Geriatric depression scale (GDS-15), generalized anxiety disorder scale (GAD-7), mini-mental state examination (MMSE), and Pittsburgh sleep quality index (PSQI) scales were used to assess psychological status. Clinical parameters and recent hospitalization history were also recorded.

**Results:** Hypertension (45%), diabetes (35%), and osteoarthritis (25%) were the most prevalent chronic illnesses. Mild depression (56%), mild anxiety (45%), cognitive impairment (45%), and poor sleep quality (78%) were common. Coronary artery disease (CAD) was significantly correlated with depression ( $p = 0.008$ ), diabetes with cognitive decline ( $p = 0.002$ ), and recent hospitalization with cognitive scores ( $p = 0.006$ ).

**Conclusion:** The study underscores the need for integrated psychological assessment and intervention in geriatric medicine, even in resource-constrained OPD environments. Chronic illnesses such as CAD and diabetes significantly affect psychological well-being in elderly patients. Routine psychological screening is essential in OPDs.

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## INTRODUCTION

The geriatric population represents a rapidly growing segment in India, presenting with increasing rates of multimorbidity. Often, psychological disorders such as depression, anxiety, cognitive impairment, and poor sleep remain unrecognized in outpatient settings. These undiagnosed issues significantly impair quality of life and treatment compliance. This study evaluates the psychological profile of elderly patients and explores correlations with chronic medical illnesses in a government hospital setting.

## Aims and Objectives

- To determine the prevalence of depression, anxiety, cognitive impairment, and poor sleep quality in geriatric patients.
- To assess the correlation between chronic diseases [e.g., coronary artery disease (CAD), diabetes] and psychological conditions.
- To evaluate the impact of recent hospitalization on psychological health

in elderly outpatient department (OPD) attendees.

## MATERIALS AND METHODS

This cross-sectional study was conducted at the medicine OPD of SVBP Hospital, Lala Lajpat Rai Memorial Medical College, Meerut. A total of 100 geriatric patients aged 60 years or above were recruited.

## Inclusion Criteria

Patients aged  $\geq 60$  years, attending the medicine OPD, willing to participate.

## Exclusion Criteria

Patients with diagnosed psychiatric illness or terminal illness.

## Assessment Tools

- Geriatric depression scale (GDS-15).<sup>1</sup>
- Generalized anxiety disorder scale (GAD-7).<sup>2</sup>
- Mini-mental state examination (MMSE).<sup>3</sup>
- Pittsburgh sleep quality index (PSQI).<sup>4</sup>

Demographic, clinical, and hospitalization history was recorded. Statistical tests included Pearson correlation and Chi-square.

## OBSERVATIONS AND RESULTS

As shown in Table 1, hypertension, diabetes, and osteoarthritis were the most common chronic illnesses.

Table 2 shows that mild depressive symptoms were reported by 56% of participants, while moderate depression was seen in only 1%. This indicates a high prevalence of subclinical emotional distress in geriatric OPD patients, with no severe depression

**Table 1:** Prevalence of chronic diseases among participants

Chronic illness	Patients (n)	Percentage (%)
Hypertension	45	45
Diabetes mellitus	35	35
Anemia	27	27
COPD/asthma	25	25
Osteoarthritis	25	25
CAD	20	20
CKD	15	15
Stroke	15	15
Tuberculosis	5	5
Chronic liver disease	5	5
Cancer	1	1

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detected, possibly due to underreporting or adaptive coping mechanisms.

Table 3 shows that nearly half of the participants (45%) experienced mild anxiety, and 24% had moderate levels. The absence of severe anxiety suggests either early-stage symptoms or masking of psychological issues in a busy outpatient setting. Anxiety often coexisted with other clinical burdens.

Table 4 shows that 45% of participants had some degree of cognitive impairment, predominantly mild (37%). This underscores the need for cognitive screening in routine geriatric evaluations, especially as cognitive

changes often go unnoticed without formal assessment tools.

Table 5 shows that poor sleep quality affected 78% of elderly patients, signifying a widespread but often neglected issue. Sleep disturbance may be a result of pain, anxiety, depression, or polypharmacy, and strongly influences overall quality of life in this age-group.

Table 6 summarizes the clinical-psychological correlations observed in the sample. Significant statistical associations were found between CAD and depression ( $p = 0.008$ ), diabetes and cognitive decline ( $p = 0.002$ ), and recent hospitalization with cognitive impairment ( $p = 0.006$ ).

depression, and none had severe depression. This indicates a large burden of subclinical emotional distress in our OPD population, which often goes unrecognized but significantly impairs quality of life.

Table 3 shows that mild anxiety affected 45% of participants, and 24% had moderate anxiety levels. The absence of severe anxiety could reflect underreporting, coping mechanisms, or early-stage symptomatology, but nevertheless underscores the need for routine mental-health evaluation.

Cognitive decline was also prominent. Table 4 demonstrates that 45% of patients had some degree of cognitive impairment, with 37% falling into the mild category. Cognitive impairment in elderly patients often goes unnoticed without formal screening but has major implications for daily functioning and treatment compliance.

Poor sleep quality emerged as another widespread but neglected issue. Table 5 reveals that 78% of elderly patients had poor sleep ( $PSQI \geq 5$ ). Sleep disturbances in geriatrics can be multifactorial—driven by pain, anxiety, depression, or polypharmacy—yet have a strong impact on overall well-being and disease prognosis.

Table 6 summarizes the statistical correlations between clinical conditions and psychological parameters. Significant associations were found between CAD and depression ( $p = 0.008$ ), diabetes and cognitive decline ( $p = 0.002$ ), and recent hospitalization with cognitive impairment ( $p = 0.006$ ). These findings align with existing literature; for example, Mehta and Yeo<sup>5</sup> reported similar associations between CAD and depression, while Biessels et al.<sup>6</sup> and Yaffe et al.<sup>7</sup> have established strong links between diabetes and cognitive decline.

Recent hospitalization also emerged as a key factor negatively affecting cognition (Table 6), supporting the need for structured

**Table 2:** Depression severity (GDS-15<sup>4</sup>)

GDS category	Patients (n)	Percentage (%)
Normal (0–4)	43	43
Mild depression (5–8)	56	56
Moderate depression (9–11)	1	1
Severe depression (12–15)	0	0

**Table 3:** Anxiety severity (GAD-7<sup>1</sup>)

GAD-7 category	Patients (n)	Percentage (%)
Normal (0–4)	31	31
Mild anxiety (5–9)	45	45
Moderate anxiety (10–14)	24	24
Severe anxiety (15–21)	0	0

**Table 4:** Cognitive status (MMSE<sup>2</sup>)

MMSE category	Patients (n)	Percentage (%)
Normal (24–30)	55	55
Mild impairment (18–23)	37	37
Moderate (10–17)	8	8
Severe (<10)	0	0

## DISCUSSION

This study demonstrates the close interrelationship between chronic illnesses and psychological health in the elderly. Among 100 geriatric patients, we observed high rates of multimorbidity, with hypertension, diabetes, and osteoarthritis being the most prevalent illnesses.

Table 1 shows that hypertension (45%), diabetes mellitus (35%), and osteoarthritis (25%) emerged as the top three chronic conditions in this cohort, reflecting the rising burden of noncommunicable diseases in elderly Indian populations. Other notable conditions included anemia (27%) and CAD (20%), which further contribute to physical and psychological strain.

Psychological conditions were highly prevalent in this population. Table 2 highlights that 56% of patients had mild depressive symptoms, while only 1% showed moderate

**Table 5:** Sleep quality (PSQI<sup>3</sup>)

Sleep quality	Patients (n)	Percentage (%)
Good sleep (PSQI <5)	22	22
Poor sleep (PSQI ≥5)	78	78

**Table 6:** Correlation between clinical conditions and psychological parameters

Clinical condition	Depression (GDS-15)	Anxiety (GAD-7)	Cognition (MMSE)	Sleep (PSQI)	p-value(s)
Hypertension	$r = 0.115$	$r = 0.068$	$r = -0.089$	$r = 0.042$	$p = 0.241$
Diabetes mellitus	$r = 0.083$	$r = -0.013$	$r = -0.305$	$r = 0.059$	$p = 0.002$ (MMSE)
CAD	$r = 0.263$	$r = 0.056$	$r = -0.042$	$r = 0.048$	$p = 0.008$ (GDS)
CKD	$r = 0.142$	$r = 0.076$	$r = -0.137$	$r = 0.028$	$p = 0.177$
Stroke	$r = 0.109$	$r = 0.023$	$r = -0.105$	$r = 0.037$	$p = 0.229$
Recent hospitalization	$r = 0.169$	$r = 0.074$	$r = -0.274$	$r = 0.185$	$p = 0.006$ (MMSE, 0.065 (PSQI))
COPD/asthma	$r = 0.097$	$r = 0.051$	$r = -0.092$	$r = 0.062$	$p = 0.265$
Osteoarthritis	$r = 0.061$	$r = -0.026$	$r = -0.035$	$r = 0.021$	$p = 0.382$
Anemia	$r = 0.138$	$r = 0.066$	$r = -0.098$	$r = 0.083$	$p = 0.192$
Tuberculosis	$r = 0.033$	$r = 0.009$	$r = -0.041$	$r = 0.017$	$p = 0.441$

mental health follow-up postdischarge, as shown by Sachdev et al.<sup>8</sup> Although conditions like chronic kidney disease (CKD), stroke, and chronic obstructive pulmonary disease (COPD) showed weak or nonsignificant associations, these trends warrant further exploration in larger studies.

Our results echo national surveys such as WHO-SAGE<sup>9</sup> and NMHS,<sup>10</sup> which indicate a high burden of undiagnosed mental health issues in the elderly. The high prevalence of mild depression, anxiety, cognitive impairment, and poor sleep—evident across [Tables 2 to 5](#)—reinforces the urgent need for routine psychological screening in geriatric medicine.

In summary, this study supports the growing body of evidence calling for mental health integration into geriatric care. Addressing psychological concerns is not merely beneficial for quality of life; it enhances compliance, reduces hospitalizations, and improves overall clinical outcomes. Even resource-constrained OPD settings can deliver meaningful geriatric mental healthcare through simple, validated screening tools and integrated care pathways.

## CONCLUSION

This cross-sectional study highlights the significant association between chronic medical illnesses and psychological impairment among the elderly. CAD and diabetes were strongly linked with depression and cognitive decline, respectively, while recent hospitalization emerged as a predictor of poorer cognitive and sleep health. The study supports integrating brief psychological screening tools into daily geriatric OPD practice to improve early diagnosis and holistic management.

## COMPARISON WITH PREVIOUS STUDIES

Several studies conducted in India and globally have examined the interplay between chronic illnesses and psychological distress in the elderly.

In a large-scale study based on the Longitudinal Aging Study in India (LASI<sup>11</sup>), Ansari et al.<sup>11</sup> reported a strong correlation between multimorbidity and depression in older adults. Our findings align partially, especially in the context of diabetes and stroke correlating with depression and cognitive impairment.

Tiwari and Pandey<sup>12</sup> noted a high prevalence of psychological morbidity, particularly depression, in Indian elderly with chronic illnesses, similar to the high percentage of mild-to-moderate depression found in our sample.

## RECOMMENDATIONS

### Routine Screening

Implement brief, validated tools (GDS-5<sup>4</sup>, GAD-7<sup>1</sup>, MMSE<sup>2</sup>, PSQI<sup>3</sup>) in geriatric OPDs to detect depression, anxiety, cognitive decline, and poor sleep.

### Integrated Care Approach

Promote multidisciplinary teams or liaison models (physician + mental health professional) even in low-resource OPDs for holistic elderly care.

### Evidence-based Management

Treat psychological issues using psychoeducation, cognitive behavioral therapy (CBT), sleep hygiene, and, where needed, age-appropriate medications (SSRIs, melatonin). Monitor regularly.

### Optimize Physical Health

Control chronic diseases aggressively. Use lifestyle changes, like exercise, to improve both physical and mental health outcomes.

## Strengthen Social Support

Address loneliness. Connect elders to senior clubs, nongovernmental organizations (NGOs), and community groups. Involve family in care plans and support caregivers.

## Leverage National Programs

Align with India's National Program for Health Care of the Elderly (NPHCE) and District Mental Health Program (DMHP) for training, referrals, and access to geriatric psychiatry services. Use WHO-mhGAP protocols in primary care.

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