

# A STUDY OF MORBIDITY PROFILE AMONG GERIATRIC POPULATION: A COMMUNITY-BASED CROSS-SECTIONAL STUDY

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## INTRODUCTION

- Population ageing is one of the most significant demographic transitions globally, with a rapid rise in the proportion of elderly individuals.
- According to the World Health Organization, elderly are defined as individuals aged 60 years and above in developing countries.
- India is experiencing a steady increase in its geriatric population due to improved life expectancy with around 9% of population and was expected to around 12% by 2050.
- The ageing process is associated with increased prevalence of chronic non-communicable diseases such as hypertension, diabetes, arthritis, chronic respiratory diseases, visual impairment, and mental health disorders.
- Multiple morbidities are common (35% - 75%) among the elderly, leading to functional dependency, reduced quality of life, and increased healthcare utilization.
- Changing family structures, urbanization, and migration have reduced traditional family support systems, making elderly care a growing public health concern.
- Many health problems in the elderly remain undiagnosed or untreated due to poor health-seeking behavior and limited access to healthcare services.
- Understanding the morbidity pattern at the community level is essential for planning geriatric-friendly health services and strengthening primary healthcare.

## AIM AND OBJECTIVES

Aim: To assess the morbidity profile among the geriatric population

## **OBJECTIVES**

1. To estimate the prevalence of common morbidities among individuals aged 60 years and above.
2. To assess the pattern of co-morbidities among the geriatric population.
3. To determine the association between socio-demographic factors and morbidity status among the elderly.

## **MATERIALS AND METHODS**

- Study design : A community-based cross-sectional study
- Study area : The study was carried out in rural field practice area of a medical college in East Godavari District, Andhra Pradesh.
- Study duration : 3 months from September to November 2025.
- Study population : The study population included elderly individuals aged 60–80 years who were permanent residents of the selected village (residing for at least one year).
- Sampling design : Systematic random sampling method.
- Sample size : 200 (Based on previous study<sup>5</sup> with estimated 70% p and 10% relative error at 95% confidence interval, 15%NR)

## **INCLUSION CRITERIA:**

1. Individuals aged 60–80 years
2. Individuals of the study residing for at least one year
3. Willing to provide informed consent

## **EXCLUSION CRITERIA:**

1. Severely ill or bedridden individuals unable to respond
2. Those who refused to participate.

## **METHOD OF DATA COLLECTION:**

- Ethical clearance was obtained from the Institutional Ethics Committee prior to commencement of the study. Data were collected through a house-to-house survey using a pre-tested and semi-structured questionnaire. Face-to-face interviews were conducted to collect information on socio-demographic characteristics, occupational status, financial dependency, and presence of chronic morbidities. Available medical records and prescriptions were reviewed wherever possible to validate self-reported morbidities. DASS-21 (Depression Anxiety Stress Scale) was used for measuring psychological status.
- Socio-Economic Status Assessment: Socio-economic status was assessed using the Modified BG Prasad Scale (year 2025).
- Operational Definition: Multimorbidity was defined as the presence of two or more chronic conditions in the same individual

## **MATERIALS AND METHODS**

**Data Analysis:**

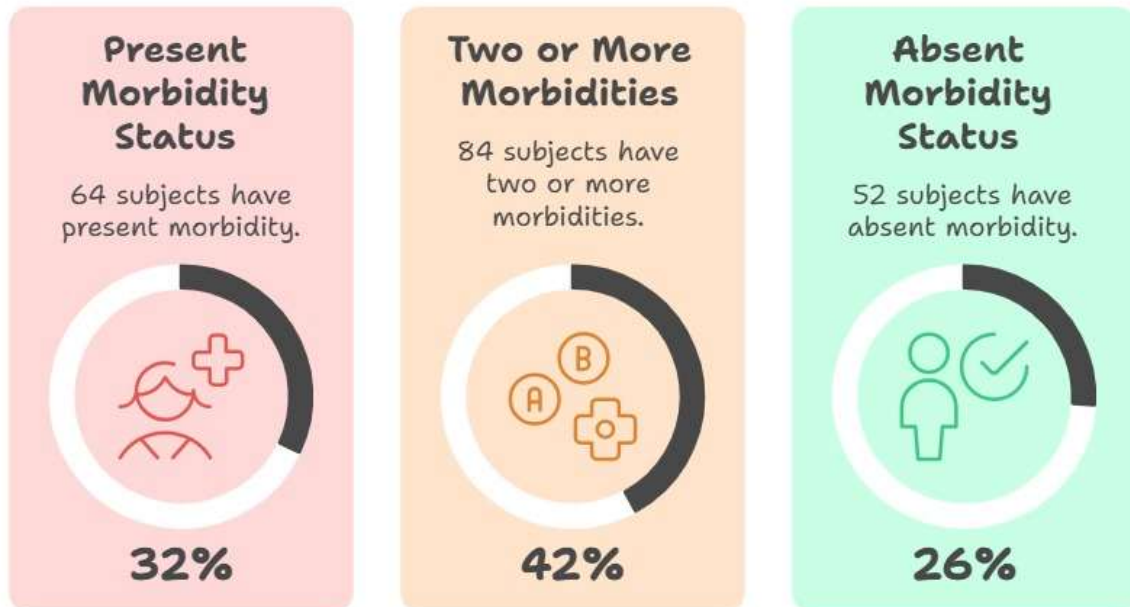
- Data collected will be entered into MS-Excel 2013 spreadsheet. The collected data will be analyzed using IBM statistical package for social sciences (IBM SPSS) version 23 software (trail version).
- Chi-square test will be used to evaluate the association between socio-demographic factors and chronic morbidity and p-value less than 0.05 will be considered statistically significant.

**RESULTS**

**Table 1: Socio-Demographic Characteristics of Study Participants**

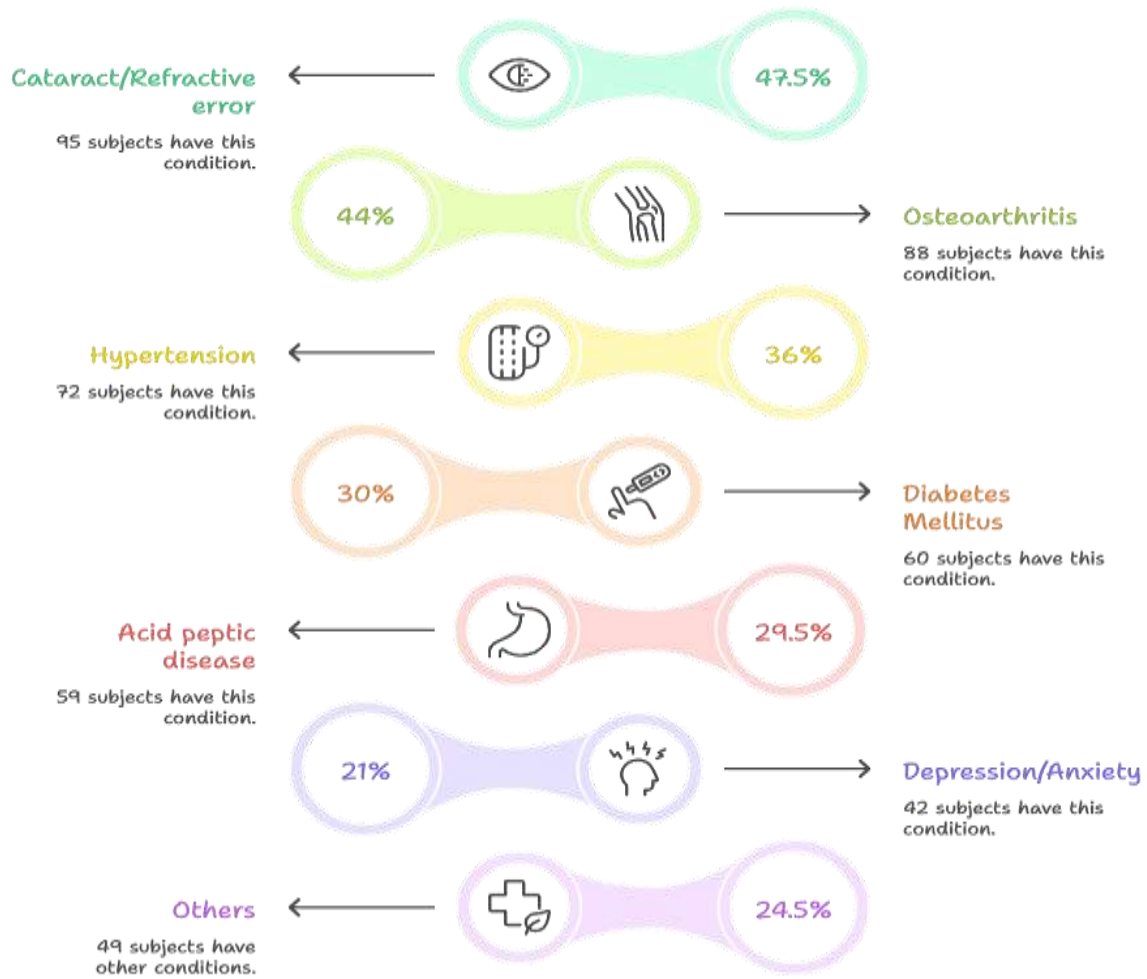
Variable	Category	Frequency	Percentage (%)
Age group	60–70 yrs	150	75%
	71–80 yrs	37	18.5%
	>80 yrs	13	6.5%
Gender	Male	97	47.5%
	Female	103	51.5%
Education	Illiterate	112	56%
	Literate	88	44%
Socio-economic status	Upper middle	121	60.5%
	Middle	47	23.5%
	Lower middle	32	16%

**Fig 1: Distribution of subjects based on morbidity status**

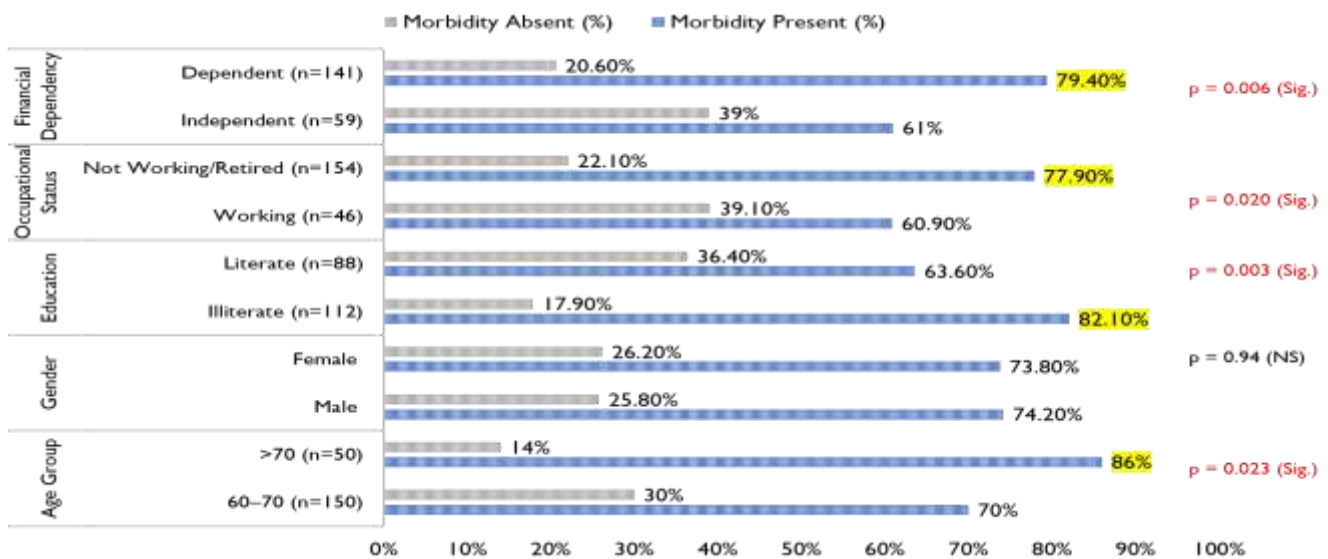


74% Subjects had morbidity  
42% were with two or more morbidities.

**Fig 2: Morbidity Condition Distribution**



**Table 2: Association between morbidity status and socio-demographic factors**



## DISCUSSION

	Present Study	Usha P et al. <sup>3</sup>	M. Yogesh et al. <sup>5</sup>	Gummidi B et al. <sup>6</sup>	Patel P et al. <sup>4</sup>
Sample Size	200	400	800	2419	National dataset
Overall Morbidity	74%	97.5%	82%	72%	30.3% single morbidity
Multimorbidity	42%	Very high (nearly universal morbidity)	62.5%	58.5%	32.1%
Age Association	Higher in >70 yrs	100% morbidity in ≥71 yrs	AOR 1.05 per year ↑	Advancing age determinant	Higher in 75+ yrs
Gender	Similar	98.6% in females (NS)	Higher in females	Female determinant	Higher in females
Education	Higher in illiterates	98.2% in illiterates (NS)	Health literacy protective	—	—
Occupation/Dependency	Significant association	Significant among unemployed & dependent	Physical inactivity risk	Obesity determinant	Living with spouse associated
Common Affected Systems	Eye (57%), MSK (55%), HTN (36%)	MSK (77%), Psychological (76%), Digestive (74%)	—	MSK + Metabolic clusters	HTN, arthritis common

## CONCLUSION

- Chronic morbidity was highly prevalent among the elderly, with nearly 3/4<sup>th</sup>(74%) of them experiencing morbidity.
- Morbidity was higher in individuals above 70 years and among illiterate participants, with significant associations observed with occupational and financial dependency status.
- Vision problems (47%), musculoskeletal conditions, and hypertension were the most common health problems.

## **RECOMMENDATIONS**

- To strengthened community-based geriatric care and integrated management of chronic diseases.
- Application of appropriate technology in geriatric in health.

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