

HEALTH PROFILE OF ELDERLY IN RURAL AREA OF PATNA

Sandhya Kumari Suman¹, Amita Sinha²

Received : 04/05/2024
 Received in revised form : 02/07/2024
 Accepted : 17/07/2024

Keywords:
 Elderly, Rural, Morbidity, Healthcare
 Access, Chronic Diseases,
 Socioeconomic Factors.

Corresponding Author:
Dr. Sandhya Kumari Suman,
 Email: drsandhyasuman10@gmail.com

DOI: 10.47009/jamp.2025.7.4.12

Source of Support: Nil,
 Conflict of Interest: None declared

Int J Acad Med Pharm
 2025; 7 (4); 58-61



¹ Assistant Professor, Department of Community Medicine, Nalanda Medical College, Patna, Bihar, India

² Professor & HOD, Department of Community Medicine, Nalanda Medical College, Patna, Bihar, India

ABSTRACT

Background: India's rapidly expanding elderly population, projected to reach 173 million by 2026, underscores the urgent need to understand their health challenges, particularly in rural areas like Bihar where healthcare access is often limited. This study aimed to comprehensively assess the health profile, influencing factors, and healthcare needs of older adults in rural Patna.

Materials and Methods: This was a cross-sectional study conducted in rural Patna, Bihar. We recruited 300 individuals aged 60 years and above using a multi-stage sampling technique. Data was collected through structured interviews with a pre-tested questionnaire and supplemented by focus group discussions for qualitative insights. All participants provided informed consent, and ethical approval was obtained. **Result:** Our findings indicate a substantial burden of chronic morbidities: nearly 73.8% of participants reported one or more chronic conditions. The most prevalent issues included non-specific generalized weakness, gastrointestinal problems, hypertension, musculoskeletal issues, and diabetes. A significant 72.5% of the elderly were illiterate, highlighting an educational disparity. While 89.0% lived with family, suggesting traditional support systems, access to healthcare remains challenging. Although 86.5% sought health advice when ill, primary barriers to treatment were lack of money and family support, and the perception that conditions were merely "age-related." Notably, 26.2% of individuals practiced self-medication. **Conclusion:** The study reveals a high prevalence of chronic diseases and significant illiteracy among the elderly in rural Patna. Despite a proactive attitude towards health-seeking, financial constraints and cultural beliefs about aging present critical barriers to adequate healthcare. Addressing these challenges through targeted interventions, enhanced access to affordable healthcare, and robust community support systems is vital to improve the quality of life for this vulnerable demographic in rural India.

INTRODUCTION

The elderly population, defined as individuals aged 60 years and above, is an invaluable asset to society, embodying a wealth of experience and wisdom.^[1] As India transitions into an aging nation, with projections indicating that the geriatric demographic will double from 83.6 million in 2006 to approximately 173 million by 2026, understanding their health profile becomes increasingly critical. This demographic shift necessitates a comprehensive assessment of the health and social challenges faced by older adults, particularly in rural settings like Bihar, where access to healthcare services can be limited.^[2]

Research indicates that older adults are particularly vulnerable to a range of chronic conditions, including musculoskeletal disorders, diabetes, hypertension,

and mental health issues such as depression and loneliness. The prevalence of these conditions is compounded by socio-economic factors such as financial dependency on family members and inadequate social support systems. For instance, a study conducted in Ghaziabad reported that nearly half of the elderly population relied financially on their families, highlighting the pressing need for targeted interventions.^[2] Moreover, cultural shifts and urban migration patterns have altered traditional family structures, often leading to increased isolation among the elderly. This isolation can exacerbate existing health issues and contribute to a decline in overall well-being. It is essential to recognize that while aging is a natural process, the accompanying health challenges require proactive measures from healthcare providers and policymakers.

The health profile of the elderly in rural Bihar presents unique challenges that may differ significantly from those observed in other rural areas of India. This comparison is vital for understanding the specific health needs and socio-economic conditions faced by older adults in this region. In rural areas, studies indicate a high prevalence of chronic conditions among the elderly, including musculoskeletal disorders, dental issues, and vision impairments. For instance, a study conducted in Ghaziabad, Uttar Pradesh, found that musculoskeletal problems affected 59.08% of the elderly population, while dental problems and vision impairments were reported at 58.77% and 55.61%, respectively.^[2] Similarly, research from UP highlights that these conditions are prevalent but often exacerbated by limited access to healthcare services and inadequate social support systems.^[3] Comparatively, other rural areas in India, such as those in South India, report varying health profiles. For example, a study in Andhra Pradesh indicated a higher prevalence of diabetes (47%) among the elderly compared to the 10% reported in Ghaziabad.^[2,4] The differences may stem from regional lifestyle factors, dietary habits, and varying levels of healthcare access.

Mental health issues also present a significant concern across rural India. Studies in rural Uttarakhand have shown similar rates of mental health challenges among older adults.^[5] Financial dependency is another critical aspect affecting the elderly's health profile. A significant portion of the elderly population relies on family support for their financial needs—45.9% reported financial dependency in Ghaziabad.^[2] This trend is mirrored in other rural areas of India but may be more pronounced in Bihar due to socio-economic factors such as poverty and limited pension schemes.^[6]

In light of these findings, this research aims to explore the health profile of the elderly in rural Bihar, focusing on morbidity patterns and treatment-seeking behaviors. By identifying prevalent health issues and understanding the socio-economic context of this population, the study seeks to inform public health strategies that can enhance the quality of life for older adults. The insights gained from this research will contribute to a more nuanced understanding of geriatric health in rural India, ultimately guiding efforts to improve healthcare delivery and support systems for this vulnerable group. In conclusion, addressing the health needs of the elderly is not merely a matter of medical intervention but requires a holistic approach that encompasses social support, economic stability, and accessible healthcare services. As India continues to grapple with its aging population, it is imperative that we prioritize research in this area to ensure that older adults can lead dignified and fulfilling lives.

Objectives

The present study was conducted with the following objectives:

- To assess the prevalence of common health conditions among the elderly population in rural areas of Patna.
- To examine the factors influencing the health status of these elderly.
- To identify the healthcare needs and priorities of the elderly.

MATERIALS AND METHODS

Study Design and Setting: The study aimed to assess the health profile of elderly individuals in rural areas of Patna, Bihar. A cross-sectional design was employed, utilizing both quantitative and qualitative methods to gather comprehensive data.

Sampling Methodology: A multi-stage sampling technique was adopted. Initially, two blocks were randomly selected from Patna district. Within these blocks, villages were chosen based on population size and accessibility. A sample size of 300 elderly individuals aged 60 years and above was determined using Cochran's formula, ensuring a confidence level of 95% and a margin of error of 5%.

Inclusion and Exclusion Criteria

Inclusion criteria consisted of individuals aged 60 years and above, residing in the selected villages for at least six months prior to the study. Participants must have been able to provide informed consent. Exclusion criteria included individuals with severe cognitive impairment or those unable to communicate effectively.

Data Collection: Data were collected through structured interviews using a pre-tested questionnaire. The questionnaire included sections on demographic details, socio-economic status, health conditions, and access to healthcare services. Additionally, focus group discussions (FGDs) were conducted to gather qualitative insights into the health challenges faced by the elderly.

Data Analysis: Quantitative data were analyzed using statistical software (SPSS version 20). Descriptive statistics were computed for demographic variables, while inferential statistics (chi-square tests) assessed associations between variables. Qualitative data from FGDs were transcribed and analyzed thematically to identify common health issues and barriers to care. This methodology provides a robust framework for understanding the health profile of the elderly, offering valuable insights for policymakers and healthcare providers in addressing their needs.

Ethical Considerations: Informed consent was secured from all participants, ensuring confidentiality and the right to withdraw from the study at any time.

RESULTS

Of the study subjects, 51.9% were male and 48.1% were female. The majority (58.2%) fell into the 60–69 years age group, followed by 32.4% in 70–79 years, and 10.4% in 80 years and above. Most of the

elderly population was Hindu (81.6%), illiterate (72.5%), and married (74.9%). Elderly males were found to be significantly more educated than elderly females ($p < 0.05$). The majority of study subjects (89.0%) were living with children and a spouse. According to the modified BG Prasad scale, 34.8% belonged to the middle socioeconomic status.

Regarding habits, 74.7% of the elderly were non-smokers, with 6.3% being current smokers, all of whom were male. Similarly, 71.8% were non-alcoholic, and the consumption of alcohol and tobacco was significantly more common in males than in females.

During the study period, 73.8% of participants had one or more chronic morbidities, with many suffering from multiple conditions. The most common morbidities were non-specific generalized weakness (61.6%) and gastrointestinal problems (52.4%), both of which were more common in females. Hypertension (42.3%) and musculoskeletal problems (38.9%) were also prevalent, with more males being hypertensive than females. Other significant diseases included visual impairment (34.8%), dental problems (11.2%), anemia (14.5%), and diabetes (32.1%).

Regarding self-reported health status, 28.1% considered their general health "good," while 63.3% reported it as "moderate," and 9.6% rated it as "bad". When ill, 86.5% sought health advice and treatment. Allopathic medicine was preferred by 62.9%, while 27.9% used both allopathic and AYUSH medication, and 9.3% used only AYUSH medications. Government hospitals were the preferred treatment facility for 59.9% of participants, while 13.9% visited private practitioners. Self-medication was practiced by 26.2%.

Among individuals with morbidity, 14.5% did not seek health advice. The primary reasons for not seeking treatment were "lack of money and family support" (57.9%) and "not feeling necessary to go to doctor as the conditions were age related" (32.3%).

DISCUSSION

The health profile of the elderly population in rural Patna, Bihar, reveals significant insights into the demographic, socioeconomic, and health-related characteristics of this vulnerable group.

Demographic Characteristics

The study found that 51.9% of the participants were male and 48.1% were female, with a predominant age group of 60–69 years (58.2%). This demographic distribution is consistent with other studies in rural India, which indicate a higher proportion of elderly males due to gender differences in life expectancy.^[7] The predominance of the Hindu population (81.6%) reflects the regional demographics of Bihar, where Hindus constitute the majority. The educational status of the elderly in this study is concerning, with 72.5% being illiterate. This finding is corroborated by other research indicating that educational attainment among the elderly in rural areas is generally low,

which can adversely affect their health literacy and access to healthcare services.^[5] The significant difference in educational levels between males and females ($p < 0.05$) highlights the gender disparities that persist in education, which is a critical determinant of health outcomes.

Socioeconomic Status: The socioeconomic status of the elderly, as measured by the modified BG Prasad scale, indicates that 34.8% belong to the middle socioeconomic class. This finding is consistent with studies that show a significant portion of the elderly in rural India live in poverty or near-poverty conditions, which can limit their access to healthcare and other essential services.^[5] The majority of participants living with children and spouses (89.0%) suggests a traditional family structure, which can provide social support but may also lead to dependency and neglect in some cases. This finding aligns with previous research suggesting that many elderly people view their health as less than optimal.

Morbidity Profile: The high prevalence of chronic morbidities (73.8%) among the elderly in this study is a significant concern, mirroring the rising burden of non-communicable diseases in India's aging population. The most common morbidities, non-specific generalized weakness and gastrointestinal problems, highlight prevalent health issues that may impact their daily lives and quality of life. The higher prevalence of hypertension among males aligns with some studies.^[8] The substantial proportion of individuals with visual impairment, dental problems, and diabetes further underscores the multifaceted health challenges faced by this demographic.

Health-Seeking Behavior and Barriers: A positive finding is that a large majority (86.5%) of the elderly sought health advice and treatment when ill, demonstrating a proactive attitude towards health management. However, the preference for government hospitals (59.9%) might indicate restricted access to private healthcare, potentially due to financial limitations. The reported self-medication practices (26.2%) are worrying, as this can lead to incorrect diagnoses and adverse health outcomes. The most common reasons for not seeking treatment—"lack of money and family support" and "not feeling necessary to go to doctor as the conditions were age related"—point to crucial barriers that need to be addressed through policy initiatives and community support efforts.^[9,10]

CONCLUSION

This study provides a comprehensive overview of the health profile of the elderly, highlights the high burden of chronic morbidities, significant illiteracy rates, and the critical role of family support. While health-seeking behavior is generally positive, financial constraints and perceptions about age-related health issues remain major barriers to adequate healthcare. Addressing these challenges through targeted interventions, enhanced access to

affordable healthcare, and community-based support systems is crucial to improve the quality of life for the elderly in this region.

REFERENCES

1. Radjasegarane A, Vasudevan K, Mathiyalagen P, Varman AP, Lopamudra M, Chellamuthu L. A community based cross-sectional study on morbidity profile of elderly in a rural area of Puducherry. *Int J Community Med Public Health* 2021;8:1945-9.
2. Bardhan H, Dixit AM, Agarwal R, Jain PK, Gupta S, Shukla SK. Morbidity profile of elderly population in Ghaziabad district: a cross-sectional study. *Int J Med Sci Public Health* 2016;5:1098-1102
3. Kumar V, Mishra S, Srivastava A, Zaidi SH, Mishra P. Morbidity pattern and health-seeking behaviour among elderly population in rural area of district Barabanki: A cross-sectional study. *Int J Med Sci Public Health* 2020;9(5):294-299
4. Reddy APK, Suresh R, Krishnamurthy S, Reddy YJV. A clinical profile of geriatric patients in medical wards at rural tertiary care hospital in South India. *J Clin Sci Res* 2016;5:101-4. DOI: <http://dx.doi.org/10.15380/2277-5706.JCSR.15.045>.
5. Palepu S, Bandyopadhyay A, Nandan T, et al. (December 05, 2023) Morbidity Profile and Healthcare Service Utilization Pattern Among Geriatric Population in the Rural Himalayan Region of Uttarakhand, India: A Cross-Sectional Study. *Cureus* 15(12): e50000. DOI 10.7759/cureus.50000
6. Usha P, Kishore S, Singh M, Jain B, Kumar D, Kumar Reddy NK, et al. A study of morbidity profile among geriatric population in Uttarakhand: A community based cross-sectional study. *J Family Med Prim Care* 2020;9:3677-81.
7. Kumar N, Kamboj G, Malik JS, Nilika, Kalhan M, Pilonia M. Medicosocial profile of rural elderly and its covariates in Northern India – A community-based study. *Int J Med Sci Public Health* 2016;5:2283-2289
8. Yadav K, Dubey DK, Shukla US, Sharma A. Assessment of nutritional status of elderly in rural field practice area of Jhalawar medical college, Jhalawar, India. *Int J Community Med Public Health* 2023;10:2529-32.
9. Purty AJ, Bazroy J, Kar M, Vasudevan K, Veliath A, Panda P. Morbidity pattern among the elderly population in the rural area of Tamil Nadu, India. *Turk J Med Sci* 2006;36:45–50.
10. Piramanayagam A, Bayapareddy N, Pallavi M, Madhavi E, Nagarjuna reddy N, Radhakrishna L. A cross sectional study of the morbidity pattern among the elderly people South India. *Int J Med Res Health Sci* 2013;2(3):372–9.