

Evaluation of Physical well-being in Elderly: A Survey-Based Study

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Abstract

Introduction: This study investigates the physical health status and problems of the elderly. With increasing life expectancy, the prevalence of chronic diseases and conditions is also increasing, which particularly affects the elderly in Ahmedabad, Gujarat.

Aim: To assess the physical well-being of the elderly.

Materials and Methods: 400 cases were collected by using structured questionnaire from Old age home population and door-to-door survey

Results: Hypertension was the most common disease affecting about 45%. About 35% of respondents suffer from diabetes. More than 30% reported osteoarthritis and other musculoskeletal conditions. About 25% reported respiratory problems, such as chronic obstructive pulmonary disease (COPD).

Conclusions: These findings highlight the urgent need for individualized health interventions to address the complex physical health challenges faced by older adults.

Keywords: Chronic Diseases, Old Age Homes, Hypertension, Diabetes, Osteoarthritis, Musculoskeletal Disorders, Chronic Obstructive Pulmonary Disease (COPD).

Introduction

Population aging is increasing globally, which has led to increased attention to the unique health challenges faced by older adults. As life expectancy increases, the prevalence of chronic diseases and conditions, particularly those affecting older adults, increases. Physical health in particular is an essential aspect of overall well-being in older adults, affecting not only the ability to perform daily activities but also the quality of life. The state of Gujarat, and the city of Ahmedabad in particular, provides a representative setting for studying the physical health status of older adults.^[1,2,8]

Understanding the specific health problems faced by older adults in this region is important for developing targeted interventions and health policies. This study aims to address this knowledge gap by conducting a detailed survey to assess the physical health of older adults in both urban and residential settings. Using a carefully designed questionnaire, this study collects data on a range of health parameters and lifestyle factors that affect older adults. By analysing this data, we aim to identify common health problems, their prevalence and contributing factors.^[1,2,5]

Objectives

The primary objectives of this study are:

1. To assess the physical health status of elderly individuals in Ahmedabad, Gujarat, identifying the prevalence of common health conditions.
2. To evaluate the impact of lifestyle factors, including diet, exercise, and social activities, on the physical well-being of the elderly.
3. To provide insights that can inform targeted healthcare interventions and policies aimed at improving the overall health and quality of life for the aging population.

Methodology

This study uses a comprehensive survey method to assess the physical health of older adults. The study design included both Old Age homes and home visits in different parts of the city. Data collection was carried out using a structured questionnaire containing 10–15 questions to assess knowledge, attitudes, and practices related to physical health in older people. Participants were asked a variety of questions about their physical health and the presence of diseases. In addition to the questionnaire, a general health assessment was conducted, including measurements of weight, height, blood sugar, and blood pressure.


Information on current medications and pre-existing diseases was also collected to provide a comprehensive overview of the physical health status of the study population.^[9] This study aims to provide a detailed and accurate picture of the health problems faced by older adults in Ahmedabad using a mixed methods approach combining direct health assessment and self-reported data. This methodological approach ensures the reliability of the results and can be used to inform health policies and interventions targeting this demographic group.

Inclusion criteria

- Age Above 60
- Willing to provide informed consent, and capable of responding to the survey questions independently or with minimal assistance.

Exclusion criteria

- Older adults in palliative care
- Inability or unwillingness to voluntarily participate in the survey
- Below 60 years Age

 Department of Clinical Research <small>Indus Institute of Science Humanities and Liberal Studies</small> PHYSICAL AND MENTAL HEALTH ASSESSMENT FORM		
GENERAL INFORMATION		
Name:	Date:	
Age:	Address:	
Gender:		
Ph: No:		
Marital status: Married/ Divorced/ Widow	No. of children:	
A. Basic Health Assessment		
Height(ft):	Pulse Rate:	
Weight(kg):	Blood Pressure:	
BMI:	Diabetes:	
B. Food Habits:		
Junk	Healthy	NonVeg
Fries <input type="checkbox"/>	Salad <input type="checkbox"/>	Eggs <input type="checkbox"/>
Burger <input type="checkbox"/>	Roti/Sabji <input type="checkbox"/>	Chicken <input type="checkbox"/>
Pizza <input type="checkbox"/>	Pulses <input type="checkbox"/>	Meat <input type="checkbox"/>
Vadapav /Dabeli <input type="checkbox"/>	Rice <input type="checkbox"/>	Sea foods <input type="checkbox"/>
Beverages <input type="checkbox"/>	Fruits <input type="checkbox"/>	Others: _____
Consumption per week: - _____		
C. Please indicate if you have any of the following medical issues:		
Disease		
Heart Disease <input type="checkbox"/>	Stroke <input type="checkbox"/>	
Diabetes <input type="checkbox"/>	Parkinson <input type="checkbox"/>	
High Cholesterol / High B.P <input type="checkbox"/>	Asthma <input type="checkbox"/>	
Data: _____		

D. Family History: Please indicate if you have a blood related relative with any of the following medical issues.	
Disease	Relationship
Heart Disease <input type="checkbox"/>	
Diabetes <input type="checkbox"/>	
High Cholesterol/ High B.P. <input type="checkbox"/>	
Asthma <input type="checkbox"/>	
Parkinson disease <input type="checkbox"/>	
Medication	

Medical History: Under medication in past	
Any surgery took place in past?	

E. Please answer questions regarding your social habits.	
1. Do you Exercise regularly? <input type="checkbox"/> Yes <input type="checkbox"/> No	
•If so, what type of exercise and how frequent? _____	
2. What best describes your lifestyle? <input type="checkbox"/> Sedentary <input type="checkbox"/> Active	
3. Do you smoke? <input type="checkbox"/> Yes <input type="checkbox"/> No	
•If so, how many unit/days? _____	
•How many years? _____	
4. Do you drink alcoholic beverages? <input type="checkbox"/> Yes <input type="checkbox"/> No	
•If so, how many drinks/months? _____	
5. Do you take Tobacco? <input type="checkbox"/> Yes <input type="checkbox"/> No	
•If so, how often? _____	
6. Do you eat a balanced diet? <input type="checkbox"/> Yes <input type="checkbox"/> No	
7. Past Covid History: <input type="checkbox"/> Yes <input type="checkbox"/> No	
8. Sleep Cycle: 5-6 Hrs <input type="checkbox"/> 7-8 Hrs <input type="checkbox"/> 8-9 Hrs <input type="checkbox"/> >9 Hrs <input type="checkbox"/>	
9. Rate your general health? : Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor <input type="checkbox"/>	

Figure 1.1

Results

The survey results provide a comprehensive overview of the physical health status of the elderly population in Ahmedabad. The demographic breakdown of the sample included a nearly equal distribution of male and female participants.

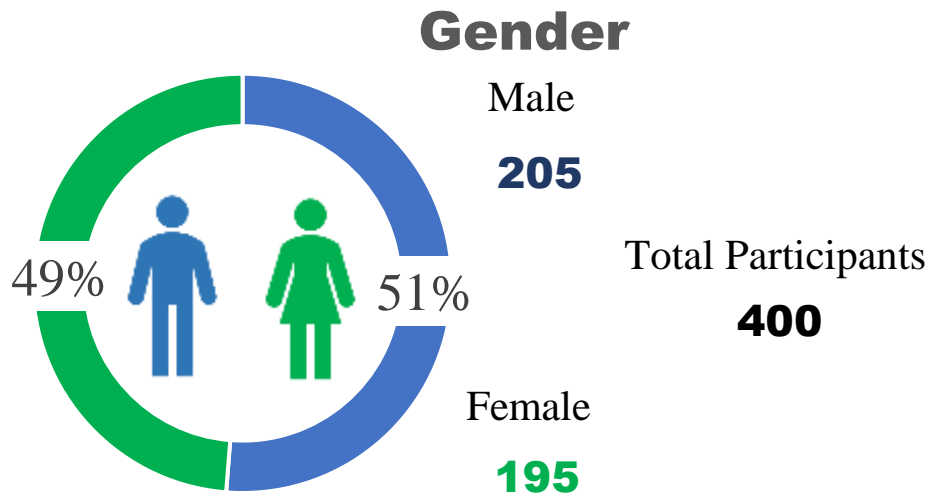


Figure 1.2
This gender balance is illustrated in [Figure 1.2].

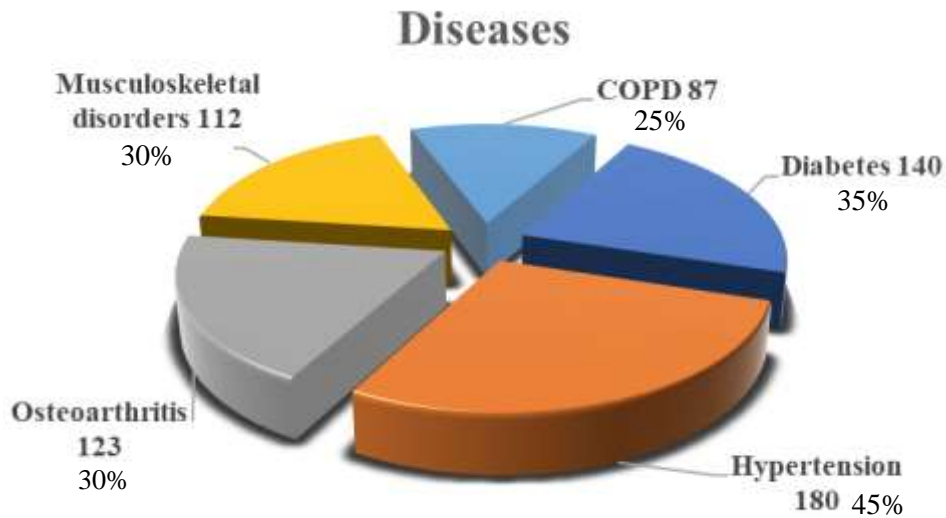


Figure 1.3

Among the prevalent health conditions, hypertension was found to be the most common, affecting approximately 45% of the participants. This was followed by diabetes, which afflicted nearly 35% of the surveyed individuals. Osteoarthritis and other musculoskeletal disorders were reported by over 30% of respondents, while around 25% indicated having respiratory issues such as chronic obstructive pulmonary disease.

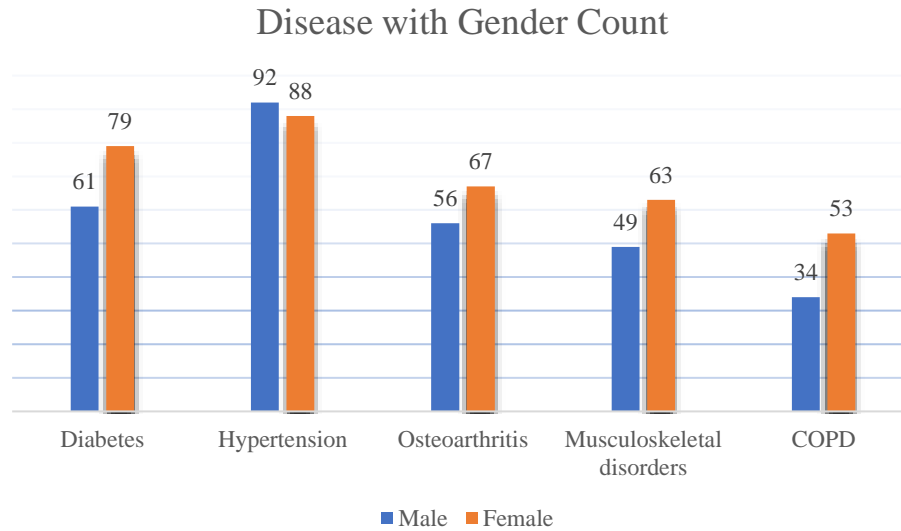


Figure 1.4

The survey revealed significant variations in the incidence of chronic conditions among elderly participants based on gender. Analysis indicated that hypertension was present in approximately 40% of the respondents, with a notable difference between genders: 45% of men reported hypertension compared to 56% of women. Diabetes affected nearly 35% of the overall population surveyed, showing a similar trend; 51% of men and 49% of women reported being diagnosed with diabetes.

Musculoskeletal disorders, including osteoarthritis, were reported by over 30% of the respondents. Here, women showed a higher prevalence of these conditions, with 55% reporting musculoskeletal issues in comparison to 46% of men. Respiratory issues such as chronic obstructive pulmonary disease (COPD) were noted in around 25% of the respondents, with men exhibiting a higher incidence rate (39%) compared to women (61%).

These findings indicate that, in general, men were more likely to report conditions such as hypertension, diabetes, and COPD, while women were more commonly affected by musculoskeletal disorders. The gender-based differences in the prevalence of these conditions underscore the importance of sex-specific approaches in the management and intervention strategies for chronic diseases among the elderly.

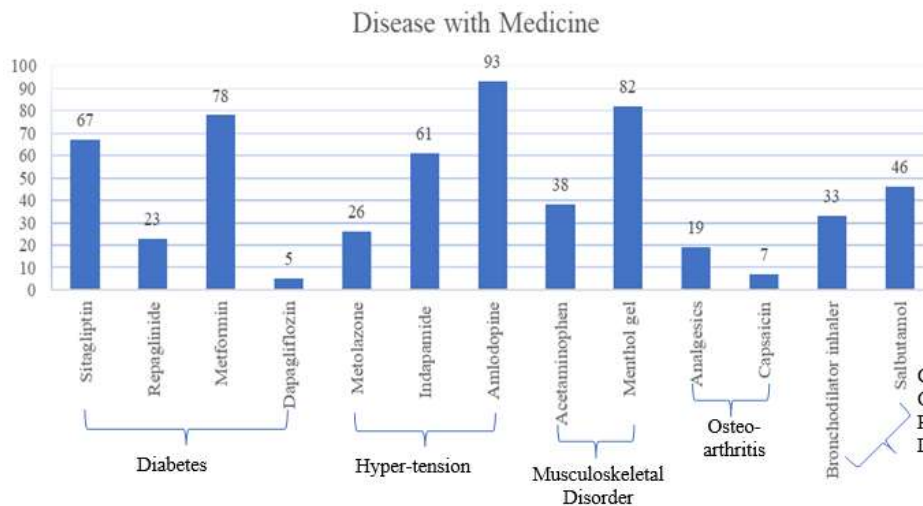


Figure 1.5

The survey revealed notable associations between the use of specific medications and the management of chronic conditions among the elderly participants, with variations observed based on gender. Hypertension was prevalent in approximately 40% of the respondents, with a higher incidence in men (45%) compared to women (35%). To manage hypertension, medications such as Metolazone, Indapamide, and Amlodipine were commonly used, with men more frequently reporting the use of these medications.

Diabetes affected nearly 35% of the participants, showing a slightly higher rate among men (38%) than women (32%). For blood sugar control, the use of medications like Sitagliptin, Repaglinide, Metformin, and Dapagliflozin was reported. Male participants demonstrated a higher usage of these antidiabetic medications.

Musculoskeletal disorders, including osteoarthritis, were reported by over 30% of the elderly, with women showing a higher prevalence (34%) compared to men (27%). Treatment for these conditions heavily relied on pain management strategies, including the use of Acetaminophen, Menthol gel, Analgesics, and Capsaicin. Women were found to use these pain relief treatments more frequently than men, reflecting the higher occurrence of musculoskeletal issues in female participants.

Respiratory issues, such as chronic obstructive pulmonary disease (COPD), were noted in about 25% of the respondents, with a higher incidence among men (30%) compared to women (20%). Common treatments included the use of bronchodilator inhalers like Salbutamol, which was more commonly reported by male participants.

These findings underscore the distinct gender-based trends in the prevalence of chronic conditions and the corresponding use of medications among the elderly, highlighting the need for tailored healthcare approaches.

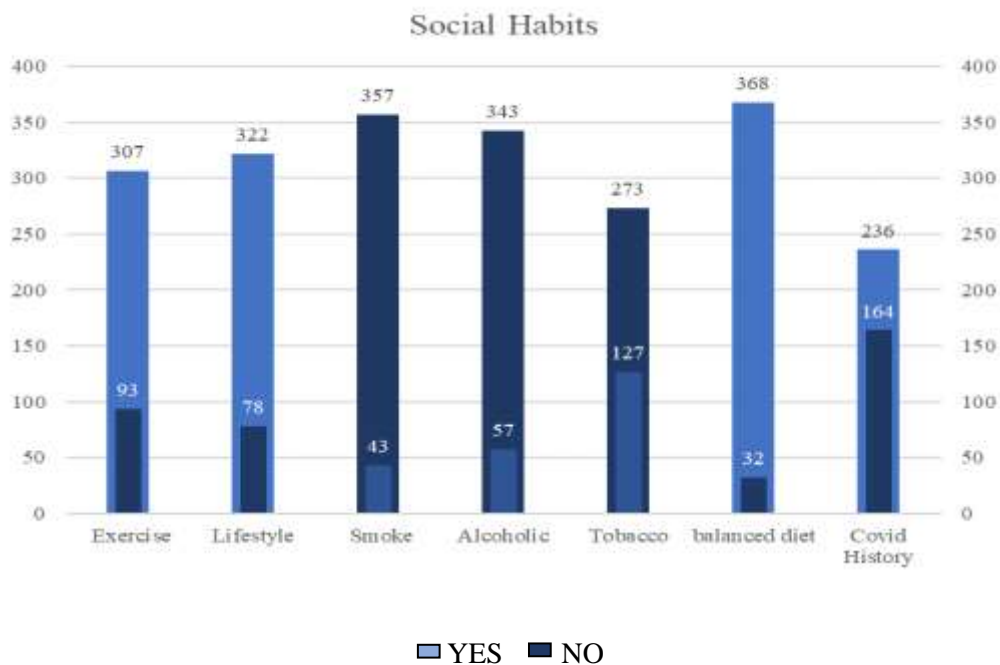


Figure 1.6

The lifestyle factors revealed significant insights; 60% of the elderly respondents reported infrequent physical activity, with walking being the most common form of exercise for those who engaged in physical activities.

Dietary habits varied, but there was a noticeable trend towards consumption of high-calorie diets low in nutritional value, contributing to obesity in 29% of the sample population. Healthcare utilization patterns showed that while 70% of the elderly had regular access to medical consultations, a significant proportion, Self-reported data indicated that knowledge about health maintenance was generally adequate, but attitudes and practices towards preventive health measures were lacking.

Many participants expressed a need for better healthcare educational resources. Physical measurements aligned with the self-reported conditions, with significant deviations in blood sugar levels and blood pressure readings observed in those diagnosed with diabetes and hypertension, respectively. This data underscores the necessity for targeted interventions to manage these chronic conditions effectively within the elderly demographic in Ahmedabad.

Discussion

The findings of this study highlight the diverse health problems faced by the older adult population in Ahmedabad. Hypertension was the most common condition, affecting almost half of the sample. Additionally, the fact that 35% of the respondents had diabetes raises concerns about their dietary and lifestyle choices. Given that dietary patterns are modifiable risk factors, public health interventions should prioritize nutrition education and support to mitigate the onset and progression of diabetes in older adults.^[3,4]

Osteoarthritis and other musculoskeletal conditions, reported by a significant proportion of the population, indicate difficulties in maintaining mobility and physical function as they age.^[4,6,11] These conditions not only impact quality of life but also increase dependence on caregivers and health services. Encouraging physical activity, even light activity such as walking, could potentially alleviate some of these problems. However, our results indicate that physical activity is uncommon among older adults in Ahmedabad, indicating an area where community-based programs could have a significant impact. Inequities in access to health care are a critical area for intervention. Despite the fact that 70% of respondents visit their physicians regularly, the remaining 30% face significant barriers.

This gap suggests the need for more effective health education programs that not only inform but actively engage older adults in health promotion activities. Tailored interventions that take into account cultural and personal factors may increase acceptance and adherence to preventive health care interventions. Finally, the body measurements collected in the study provide objective evidence of self-reported conditions, confirming the high prevalence of poorly managed chronic conditions such as hypertension and diabetes.^[7,12] These findings argue for a more robust health care system that emphasizes regular monitoring and individualized treatment plans for chronic conditions in older adults. This study has identified serious health problems in the elderly population of Ahmedabad that require immediate and targeted public health interventions.

Conclusion

The conclusions of this study highlight the urgent need for individualized health interventions to address the complex physical health challenges faced by the elderly population in Ahmedabad. The high prevalence of chronic diseases such as hypertension, diabetes, and osteoarthritis requires targeted public health strategies that emphasize regular screening, effective disease management, and lifestyle changes. Solutions such as mobile clinics and subsidy programs must be implemented to ensure that all seniors have access to the care they need. Moreover, there is an urgent need to bridge the gap between

knowledge and practice of preventive health behaviors. Educational programs should be designed to not only inform but also empower older adults to integrate healthy habits into their daily lives. By addressing these key areas, we can improve the overall physical health and quality of life of the older population in Ahmedabad. Through a comprehensive and community-centered approach, we can help create an environment where older adults can live healthier and more independent lives.^[7,15]

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