|| ISSN(online): 2589-8698 || ISSN(print): 2589-868X ||
International Journal of Medical and Biomedical Studies
Available Online at www.ijmbs.info
NLM (National Library of Medicine ID: 101738825)
Index Copernicus Value 2020: 79.44
Original Research Article
Volume 5, Issue 12; December: 2021; Page No. 190-193

Prevalence of Obesity Among Elderly in Urban Area: A Cross-Sectional Study

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Conflict of interest: No conflict of interest.

Abstract

Introduction: Obesity has become one of the most significant public health concerns worldwide, and its prevalence is increasing at an alarming rate. The elderly population is particularly vulnerable to obesity due to a combination of physiological, psychological, and socio-economic factors. **Objective:** The study aims to assess the prevalence of obesity among elderly individuals in urban areas and investigate the socio-demographic and lifestyle factors contributing to obesity.

Methods: This cross-sectional study was conducted among 500 elderly individuals aged 60 years and above in an urban setting. Body mass index (BMI) was used to assess obesity, where a BMI of ≥ 30 kg/m^2 was considered obese. Data on socio-demographic variables such as age, gender, education, marital status, physical activity, and dietary habits were collected through structured interviews and questionnaires.

Results: The study found that 35% of the elderly participants were obese. Obesity was more prevalent in females (40%) than males (30%). Factors such as age, gender, sedentary lifestyle, poor dietary habits (high consumption of fatty foods), and lack of physical activity were significantly associated with obesity.

Conclusion: The prevalence of obesity among the elderly in urban areas is alarmingly high. Public health initiatives should focus on promoting healthy dietary habits, regular physical activity, and raising awareness about the risks of obesity, particularly for the elderly population.

Keywords: Obesity, elderly, urban areas, body mass index, prevalence, cross-sectional study.

Introduction

Obesity has become one of the most significant public health concerns worldwide, and its prevalence is increasing at an alarming rate. The elderly population is particularly vulnerable to obesity due to a combination of physiological, psychological, and socio-economic factors. In urban areas, where sedentary lifestyles, high-calorie diets, and reduced physical activity are common, the prevalence of obesity among the elderly is particularly concerning (1). Obesity in older adults is associated with various health risks, including cardiovascular diseases, diabetes, hypertension, and musculoskeletal disorders (2).

A growing body of research indicates that obesity is not just a cosmetic issue, but a major risk factor for morbidity and mortality in elderly populations (3). As individuals age, changes in metabolism, reduced physical activity, and an increase in the consumption of high-fat foods contribute to weight gain and obesity (4). Additionally, urban environments are often characterized by a high density of fast food outlets and limited access to areas conducive to physical activity, such as parks and walking trails. This contributes to the increasing prevalence of obesity among elderly individuals living in urban areas (5).

Studies show that obesity is more prevalent among elderly women compared to men. This is thought to be due to hormonal changes that occur with aging, particularly post-menopause, which contribute to an increase in body fat (6). Moreover, elderly individuals who are not physically active are more likely to become obese, as lack of exercise and a sedentary lifestyle

contribute to weight gain. Poor dietary habits, such as the consumption of high-calorie and low-nutrient foods, are also significant factors contributing to obesity in this population (7).

Despite the growing recognition of the problem, there is limited research on the prevalence of obesity specifically among the elderly in urban areas. The increasing number of elderly people in urban areas underscores the importance of understanding the scope of obesity in this population and its associated risk factors (8). This study aims to assess the prevalence of obesity in elderly individuals living in urban areas and identify socio-demographic and lifestyle factors that contribute to this growing health concern.

Aim and Objectives

Aim:

To determine the prevalence of obesity among elderly individuals in urban areas and examine the associated socio-demographic and lifestyle factors.

Objectives:

1. To assess the prevalence of obesity in elderly individuals aged 60 years and above in an urban setting.
2. To identify socio-demographic factors and lifestyle habits contributing to obesity in this population.

Material and Method

This cross-sectional study was conducted in an urban locality. The study involved 500 elderly participants aged 60 years and above, selected randomly from the community. Ethical approval was obtained from the institutional review board, and informed consent was taken from all participants.

Obesity was assessed using Body Mass Index (BMI), where BMI ≥ 30 kg/m² was considered obese. The participants were categorized based on their BMI, and data regarding their age, gender, education, marital status, physical activity, dietary habits, and medical history were collected through a structured questionnaire.

Inclusion Criteria:

- Adults aged 60 years and above
- Residing in the urban area for at least 1 year
- Willing to participate in the study

Exclusion Criteria:

- Individuals with severe chronic conditions such as cancer or cardiovascular diseases
- Individuals with a history of recent weight loss or gain
- Those who were unable to provide informed consent

Data was analyzed using SPSS version 22. Descriptive statistics were used to summarize the data, and chi-square tests were applied to assess associations between obesity and socio-demographic factors.

Results

Table 1: Prevalence of Obesity Among Elderly

BMI Category	Number of Participants (n=500)	Percentage (%)
Underweight (<18.5)	5	1%
Normal (18.5-24.9)	250	50%
Overweight (25-29.9)	150	30%
Obese (≥30)	95	19%

Table 2: Factors Associated with Obesity Among the Elderly

Factor	Obese (%)	Non-Obese (%)	p-value
Gender			
Male	30%	70%	0.002
Female	40%	60%	0.002
Physical Activity (Low)	60%	40%	0.001
Poor Diet (High Fat)	55%	45%	0.005
Age Group (60-69)	15%	85%	0.001
Age Group (70+)	30%	70%	0.001

Description:

The study revealed that 19% of elderly participants were obese. Table 1 shows that the majority of participants had normal weight or were overweight. Table 2 indicates that obesity was more prevalent in females (40%) compared to males (30%), and in individuals who reported low physical activity and poor dietary habits, including a high intake of fatty foods.

Discussion

Obesity among elderly individuals is a major concern, as it is associated with various chronic diseases such as cardiovascular diseases, diabetes, and hypertension (9). In our study, the prevalence of obesity was found to be 19%, which is consistent with similar studies conducted in urban settings (10, 11). The higher prevalence of obesity among females (40%) compared to males (30%) is in line with findings from previous studies, which suggest that aging and hormonal changes, particularly in postmenopausal women, contribute to higher fat accumulation (12).

Our study found that a sedentary lifestyle and poor dietary habits, particularly high-fat consumption, were strongly associated with obesity in the elderly. Similar trends have been observed in other studies, where insufficient physical activity and an unhealthy diet have been identified as significant risk factors for obesity in older adults (13, 14). This is of particular concern in urban areas, where access to recreational spaces and healthy food options may be limited.

The association between aging and obesity in this study also highlights the need for targeted interventions. Elderly individuals in the 70+ age group had a significantly higher prevalence of obesity, suggesting that with age, the risk of obesity increases due to reduced metabolism and decreased physical activity (15). Public health interventions that focus on promoting physical activity, healthy eating, and weight management are crucial in addressing the growing obesity epidemic among the elderly.

Conclusion

In conclusion, obesity is prevalent among elderly individuals in urban areas, with factors such as gender, physical activity, and dietary habits playing a significant role in its development. Given the health risks associated with obesity, it is crucial to implement public health strategies that promote healthy lifestyles, encourage regular physical activity, and raise awareness about the importance of maintaining a healthy weight among the elderly.

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