



AWARENESS OF SARCOPENIC OBESITY IN OLDER ADULTS: AN OBSERVATIONAL STUDY

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Abstract

The population explosion that we see today is also witnessing a proportionate increase in the overall number of older adults. Increase in the overall population of older adults is compounding the various age-related concerns that we see in this ageing population. This cross-sectional observational study examines the awareness of Sarcopenic Obesity (SO) amongst older adults. Obesity and sarcopenia coexist in SO which is a condition that impairs mobility, independence and overall quality of life.

This cross-sectional study was conducted on 151 older adults in the age group of 55 years and above. A self-devised, pre-validated and self-administered questionnaire was distributed via Google Forms and direct interviews to collect data from the recruited subjects on demographic profiles, awareness levels, health behaviours, and knowledge of sarcopenic obesity. Data analysis was performed using Microsoft Excel and depicted with descriptive statistics.

The study found that 82.78% of participants were unaware of the existence of sarcopenic obesity, and only 17.21% had prior knowledge about it. While 74% of subjects were ignorant about clinical features, 70 % believed SO is a preventable condition.

However, only 55 % were aware of the role of preventive measures such as diet and exercise. Lack of information (33.96%) and low prioritization (23.72%) were identified as key barriers to awareness in this study.

This study concluded that there is a significant gap in awareness of sarcopenic obesity amongst older adults. As indicated from the results of this study we recommend that incorporating educational programs into community health initiatives could improve awareness and therefore chances for early intervention. Encouraging strength training, dietary modifications, and regular health check-ups may also help manage and prevent sarcopenic obesity.

Index Terms

Sarcopenic obesity, awareness, older adults, prevention, health education.

Overview

Normal Aging is associated with some chronological but physiological changes that impact physical abilities and overall well-being. Progressive physiological alterations brought on by aging jeopardize metabolic health muscle mass and strength. One of the most prominent age- related changes is Sarcopenia which is a progressive loss of skeletal muscle mass. The loss of muscle combined with obesity is termed as Sarcopenic Obesity (SO). This SO presents a unique challenge for public health. This is because sarcopenic Obesity tends to exacerbate the age related functional decline due to its impact on mobility, frailty, and metabolic health.

A growing public health concern SO is a result of global demographic shifts toward an aging population. Despite its increasing prevalence, older adults still have little awareness of it. The under diagnosis could be a result of misconceptions that weight gain and weakness are normal aspects of aging. Early detection and prevention can postpone or even reverse its onset. This can be achieved through resistance training physical activity and nutritional optimization. This study therefore sought to assess older adults' health behaviors awareness levels and obstacles related to sarcopenic obesity.

Methodology

Ethical approval for this cross-sectional study was obtained from the Institutional Ethics Committee.

Sample Size and study participants: 151 senior citizens who were 55 years of age or older, had a minimum score of 23 on the Mini-Mental State Examination (MMSE) and gave a written informed consent, were recruited for this observational study.

Exclusion Criteria: Diagnosed cases of sarcopenic obesity, subjects with incapacitating illnesses or serious comorbidities which could interfere with metabolic or muscle health were excluded from the study

Data Collection

A self-made, pre-validated questionnaire was used to collect data via online (Google Forms) and offline (direct interviews) methods.

Data Analysis & Results

Microsoft Excel was used to compile and analyze the responses. To summarize the results, descriptive statistics such as frequency, percentage, mean and standard deviation were used.

Demographic Profile

The mean age of participants was 63.87 ± 8.26 years. Educational background showed that 48.34% were graduates, and 49% had primary or secondary education. Socioeconomic status distribution revealed that 46.35% belonged to the low-income group, while 29.13% were from the middle-income group.

Degree of awareness and knowledge

The phrase sarcopenic obesity was unknown to 82.78% participants. Just 17.21% people had previously heard of the condition. 64.41% could identify symptoms of SO, but only 54.96% were aware of preventive measures

Sources of Information

14.1% relied on friends or family and only 12.17% obtained information from healthcare professionals or media

Behaviors related to health

31.78% engaged in regular physical activity, but only 5.96% performed strength training daily. 80.79% of the study participants did not follow a specific diet plan. 64.9% visited healthcare professionals for routine check-ups, but only 14.07% included bone health assessments in these check-ups.

Barriers to Awareness

33.96% participants cited lack of information as a major reason for lack of awareness while 23.72% of the study subjects noted low prioritization of the issue as an important factor affecting the level of awareness.

Table 1: Summary Table for Awareness and Behavioral Indicators

Parameter	Observation	Percentage (%)
Unaware of Sarcopenic Obesity	Participants without prior knowledge	82.78
Awareness of the condition	Participants with prior knowledge	17.21
Knowledge of the clinical features	Limited understanding of SO signs & symptoms	73.69
Belief that SO is preventable	Positive perception of preventability	70.19
Awareness of preventive measures	Exercise and diet awareness	54.96
Cited lack of information as barrier	Primary hindrance to awareness	33.96
Cited low prioritization as barrier	Secondary hindrance to awareness	23.72

Discussion

This study was undertaken to explore the awareness about sarcopenic obesity in older adults through a survey. Our study highlighted a significant gap in awareness and understanding of sarcopenic obesity amongst the older adults. We found that roughly only one in six respondents in our study recognized the condition, indicating its limited awareness which in turn might be indicative of its under representation in the community health communication.

This is aligned with some previous studies that have documented poor awareness and under diagnosis of SO in aging populations. Batsis JA & Villareal DT in their research on Sarcopenic obesity in older adults, noted that sarcopenic obesity is under-recognized and frequently under-diagnosed in clinical practice despite of its growing prevalence.

Prado CM et al in their research published in Nature Reviews Endocrinology, stated that the public and professional awareness of sarcopenic obesity is low, resulting in late identification and therefore missed opportunities for prevention.

Kirk B et al also conceded in their research published in The Journal of Clinical Medicine, that the awareness among older adults regarding the combined effects of obesity and muscle loss is very limited.

Our study also confirmed that there is a considerable gap in awareness and understanding of sarcopenic obesity among older adults, a fact that is consistent with previous reports that have documented the low public and professional recognition of sarcopenic obesity that leads to its frequent under diagnosis especially in the aging populations (Batsis & Villareal, 2018; Donini et al., 2022; Prado et al., 2024; Cruz-Jentoft & Sayer, 2019; Kirk et al., 2021).

Although many study subjects believed that SO could be prevented, awareness of specific preventive measures—especially role of diet and resistance training—was inadequate.

Our study also showed that barriers such as lack of information and low prioritization of the condition exist in the study group. These barriers present as a major hindrance to the awareness efforts to promote awareness of the concern. In addition, in our study we found that most of the study participants relied on informal sources rather than seek information from the healthcare professionals. This might actually give rise to a potential source of misrepresentation of facts and proliferation of myths. This also precludes an important avenue for correct information as well as a substantiated means of busting any myths pertaining to the condition. This revelation further emphasises the need for structured education in the field.

Limited engagement in physical activity, particularly resistance training, underscores the need for targeted exercise programs for older adults which are comprehensive as well as backed by evidence. Cultural beliefs also seem to influence perceptions, with many of the subjects viewing age-related functional decline as inevitable part of ageing process rather than a preventable prospect.

Conclusion

This study facilitates following conclusion to be drawn from the analysis of the collected data:

Awareness of sarcopenic obesity is significantly low amongst older adults. We also found that awareness of the role and use of strength training and dietary interventions, which are considered crucial in the prevention as well as management of sarcopenic obesity, unfortunately remains underutilized.

So, the authors recommend that the healthcare professionals, especially the Physiotherapists, must play a more proactive and pivotal role in educating patients about Sarcopenic obesity. Moreover, there is an imminent need to train the healthcare providers to enhance awareness and optimize management strategies for sarcopenic obesity. In addition, at the grass root level, community-based educational programs should be implemented to bridge the current knowledge gaps seen in general public. At the level of the policy makers, policy-level initiatives should be initiated to promote active aging and facilitate preventive healthcare strategies.

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