



Prevalence and Associated Factors of Overweight and Obesity Among Middle Aged Population of selected Flats in Thiruvananthapuram Corporation of Kerala State in India

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DOI: 10.31080/ASWH.2023.05.0467

Received: September 20, 2022

Published: January 13, 2023

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Abstract

Background of the Study: Obesity is a major contributor for mortality of adults all over the world. Even though initially it was the problem of people in developed countries, gradually it is progressing in developing countries also.

Methods: In this study, quantitative research approach with cross sectional descriptive design was employed. The study was conducted in selected flats in Thiruvananthapuram Corporation. Population consist of middle aged adults between 35-55 years of age. Sample size was 110. Self-report technique was utilized for collection of data. Anthropometric measurements were also taken. Structured questionnaire was the tool.

Results: The study revealed that 62,72% of the participants were overweight/obese. There is significant association between overweight/obesity and inadequate exercise, presence of family history of overweight/obesity, and presence of non-communicable disease.

Conclusion: These findings throw light on the need for educating the people regarding the need for lifestyle modification.

Keywords: Overweight; Obesity; Flat

Introduction

Overweight and obesity are the major contributors of deaths among adults all over the world. In recent decades obesity is becoming more prevalent. Initially it was a burden of developed countries and high socioeconomic strata. But people of developing countries and general population are getting affected. So obesity and overweight are growing as significant life style problems of community [1].

Due to the possible consequences of major diseases, obesity and overweight are considered as significant problems related

to health. There are many factors which favours development of obesity. Preventive strategy of obesity must be given much weightage as it needs change of life style [2]. Overweight and obesity is associated with an increased risk of disease and death. Research evidences show that mortality from cardiac disease and stroke can be reduced by controlling blood pressure and cholesterol level. The number of people affected with obesity is increased three times more by last fifty years. It has become highly prevalent among all age groups starting from under five children, adolescents and adults. This has become a factor leading to death in comparison with underweight [3].

As per the reports of WHO, overweight and obesity are the foremost causes of mortality all over the world. For the last four decades the afflicted number of people have doubled. Globally they can be considered as silent epidemic [4]. During the community survey investigators have noticed that, the rate of obesity were high among the people who are living in cities. So they have decided to conduct a study regarding prevalence of overweight and obesity in urban population.

Materials and Methods

Objectives of the study were to measure proportion of overweight and obesity and to identify factors associated with overweight and obesity among middle aged population residing in selected flats in Thiruvananthapuram Corporation. Obesity and overweight is the increased fat storage which causes a threat to health. Obesity is identified by calculating body mass index. BMI above or equal to 25 is classified as overweight and above or equal to 30 is grouped into obesity. Assumption of the present investigation was that overweight and obesity are more common in people residing in flats, because of their sedentary life and many factors influence for the development of overweight and obesity.

In this study Quantitative research approach was employed for the study. Design used in the study was cross sectional descriptive. The inquiry was carried out in selected flats in Thiruvananthapuram Corporation, Population for the study consist of middle aged people in the age group of 35-55 years. A total number of 110 sample were selected for the data collection. Exclusion criteria included physical and mental disability.

Self-report technique was employed for gathering information. Anthropometric measurements of participants were also taken. Structured questionnaire was utilized for collection of data. The tool was prepared after an extensive search of related topic. Guidance and suggestions from experts also assisted in development of tool. The reliability and validity were established. The tool consist of the sections such as socio demographic data, clinical profile, anthropometric measurements and questionnaire for the identification of associated factors of obesity and overweight which include dietary practices, sleep habit and exercise pattern.

After obtaining permission from concerned authority, a pilot study was conducted in 11 samples from a flat to determine the feasibility and practicability of the tool. The result of the study were

analysed and discussed with experts. Necessary modifications were made in the tool. After obtaining administrative sanction from Thiruvananthapuram Corporation, permission was obtained from residence association of each flat. Informed consents were availed after explaining the study purpose to the participants. Duration of data collection was 15 minutes. After the data collection using questionnaires, anthropometric measurements were taken. For the analysis of data both descriptive as well as inferential statistics were employed based on the objectives.

Results

Majority of the study participants (63.63%) were between 46 to 55 years of age. Sixty percentage of the sample were females. More than half of the people were having the educational qualification of graduation and above. Most of the participants (30.9%) were professionals.

Variables	Frequency	Percentage
Age in years		
35-45	40	36.36
46-55	70	63.63
Gender		
Male	44	40
Female	66	60
Level of education		
Primary	3	2.72
High school	7	6.36
Higher secondary	24	21.81
Graduate/diploma	42	38.18
Post graduate/ professional degree	34	30.9
Occupation		
Professional	34	30.9
Office work	26	23.6
Shop/business	13	11.81
Coolie worker	3	2.72
Unemployed	34	30.9

Table 1: Distribution of participants based on socio personal variables. N = 110.

Classification based on BMI	Frequency	Percentage
Normal	41	37.27
Overweight	54	49.09
Obese	15	13.63
Total	110	100

Table 2: Distribution of participants according to their BMI. N = 110.

Table 2 reveals that 13.63% of the participants were obese, 49.09% of them were overweight whereas 37.27% of the participants have normal BMI.

Selected variables	Obesity/overweight		Chi square value
	Yes	No	
Income status			
Low income	38	25	0.567
High income	31	16	
Family history of obesity/overweight			
Yes	30	39	5.203*
No	39	32	
Non communicable diseases			
Present	41	16	4.283*
Absent	28	25	
Regular exercises			
Adequate	14	21	4.283*
Inadequate	48	27	
Dietary practice			
Appropriate	6	6	0.931
Inappropriate	63	35	
Sleep pattern			
≤ 6 hours	28	15	2.561
>6 hours	41	26	

Table 3: Bivariate Analysis of obesity/overweight with selected factors. N = 110.

*significant at 0.05 level of significance.

From the table No 3, it is evident that there is statistically significant association between obesity/overweight and selected variables such as family history of obesity/overweight, inadequate exercises and presence of non communicable diseases.

Discussion

The study focused on the assessment of prevalence and associated factors of overweight and obesity among middle aged population in selected flats in Thiruvananthapuram Corporation. Evidence from the present study shows that among the 110 samples, 69 were obese/overweight. This finding is congruent with study conducted by National Health Survey to determine the prevalence of obesity and identify the associated factors in Brazilian adult population in 2013 which revealed that the prevalence of obesity was 16.8% for men and 24.4% for women. Results of another study conducted in Cadiz (Spain) shows that prevalence of overweight and obesity in Cadiz is 37% in males and 17% in females [5].

The current study shows that, there is a significant association between obesity and life style diseases. This finding is congruent with other study conducted at México, the result of which reveals that there is a strong association between obesity/overweight with life style disease like dyslipidaemia, hypertension and diabetes mellitus. Evidence from a cross sectional conducted in China also states the relationship among overweight/obesity with lifestyle disease [6]. The findings of present study shows that there is a significant association between overweight/obesity with family history of obesity. This finding is also in agreement with a cross sectional study conducted in East Coast Malaysian Peninsula which showed that among the respondents family history of obesity is strongly associated with abdominal obesity [7].

Conclusion

Present study reveals that 62.72% of the participants were overweight/obese. There is a significant association between overweight/obesity and exercise pattern, presence of family history of overweight/obesity, and presence of non-communicable diseases. On the light of the findings, following recommendations can be put forwarded. Early diagnosis of obesity/overweight can reduce the incidence of life style diseases. There should be provision of screening for overweight/obesity (BMI) in NCD (Non communicable disease clinic) clinics. Health education regarding

dietary modifications and importance of regular exercises should be planned for the population. Voluntary organizations can be utilized for conducting health education programmes regarding exercise.

The study suggests further research in related areas. The study can be extended to a large sample. Further studies can be conducted regarding appropriate dietary practices. Study can be conducted as a comparison between overweight/obesity among high class and low class people. Similar inquiry can be conducted among different age groups. Further investigations can be conducted to detect the consequences of overweight/obesity.

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