

**Original article:**

## Prevalence of Obesity in high economy group of Adults

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### Abstract:

Obesity is world wide concern nowadays. It brings many medical conditions like arthritis, diabetes and cardiac element. High economy group people are more vulnerable for obesity. Age factor, sedentary life, medical conditions add to the risk factor. Our study is among the high economy group and age above 40 years. 133 individuals participated in this study. Anthropometric measurements like height and weight were measured and body mass index ( BMI) was calculated. Very high prevalence of obesity was found in the study group. Age factor and sedentary lifestyle were the key factor for the high percentage of obesity. Unhealthy food habits also added to the situation. Obesity was high in active age group also, which is very alarming. The study reinforces the need of awareness about healthy lifestyle, Proper diet and daily exercise.

Key words: Obesity, High economy.

### Introduction:

Obesity in old age people is basically related with sedentary life and loss of muscle mass<sup>1,2</sup>. After 60 years of age less activity gives rise to accumulation of extra fat in the body. With the hormonal changes, the muscle mass also reduces which adds to the condition<sup>3</sup>. Food habits do not change with the changed lifestyle. Amount of calories required also change with the age and activity. But some individuals exercise regularly and try to keep themselves fit. Diabetes, Blood pressure, Arthritis may add to obesity or may be the complication of it<sup>4</sup>. Obesity has become a worldwide concern. Around 300 million people are obese and around 1 billion people are overweight. Obesity more prevails in high economy group people for obvious reason. Obesity leads to many medical conditions and some studies shows that it is more dangerous than smoking and drinking. Our study is to find out prevalence of obesity in high economy group with age ranging from 40 to 80. We also tried to find out relation between active (exercising) individuals and obesity.

### Material and Method:

This cross sectional study was conducted in group of people working in NGOs, School teachers, Retired persons. The age group was between 40 years and 80 years. After explaining the propose of the project, written consent from each individuals was obtained. Confidentiality was assured in all aspects. The information collected was age, gender, height and weight. 133 individuals participated in this study. All individuals were instructed properly for taking the measurements. Weight was measured in kilograms and height was measured in meters. BMI was calculated by dividing an individual's body weight in kilograms by their height in squared meters ( Weight Kg/ Height M<sup>2</sup> ). Data was collected and analysed statistically. Other information regarding the regularity in exercise, type of exercise and food habits was also collected. The prevailing diseases and change in the lifestyle was also noted. The information was gathered by personal interview. Data was collected and statistically analysed and results were obtained. BMI values were considered for Indian standards.

**Results:**

From our study the results we found out were as follows.

The criteria based on BMI for obesity (revised Indian Standards) was taken as follows:

Category	BMI
Underweight	Below 18
Normal Weight	18 to 23
Overweight	23 to 24.99
Obese	25 and above

The overall picture from the whole data is –

	Normal	Overweight	Obese
Total 134 Individuals	15.79%	23.31%	60.9%

The difference in Males and Females is –

	Normal	Overweight	Obese
Males	18.06%	27.78%	54.16%
Females	13.11%	18.03%	68.85%

Age of 60 was taken as division point , as nowadays individual is active till that age.

The difference in age groups is as follows –

Males			
Below 60 yrs	14.29%	34.28%	51.43%
Above 60 yrs	21.62%	21.62%	56.76%

Females	Normal	Overweight	Obese
Below 60 yrs	15.39%	20.51%	64.1%
Above 60 yrs	9.1%	13.63%	77.27%

**Discussion:**

Obesity in adults, especially those with the sedentary life is growing very fast. Socioeconomic factor plays a major role in this condition. High socioeconomic group is more vulnerable for obesity and the diseases following it. In this study we found out that, Some people exercise regularly and some irregularly. Some of them were suffering from illnesses like joint pain, high blood pressure, diabetes. Heart disease was also an added factor in this age group.

In the present study we found out that, maximum individuals are obese (around 60%), some have overweight (around 24%) and very few have normal weight (around 16%). In study conducted by Purohit et al<sup>4</sup> reported 35.50% obesity in overall group. Mehta et al<sup>5</sup>, reported 11.53% obesity in overall population. Tiwari et al<sup>6</sup>

reported prevalence of overweight was 13% and obesity was 2%.but these studies were conducted on young individuals

If we compare the Male and Female data, the males have less tendency towards obesity as compared to females. In females percentage of obesity is more than 15% as compared to males. Mehta et al<sup>4</sup> reported more obesity in boys than girls. While study done by Goplakrishnan et al<sup>7</sup> and Gudegowda et al<sup>8</sup> reported obesity more in Females (15.7%) compared to males ( 13.7%)

No much difference is seen in Males when they are categorised in age group above and below 60 years. But obesity is more in older age group. Same is seen in Females also.

Around 70% individuals were regular in mild to moderate exercise. And it reflected on the results. No weight changes were noted in most of the individuals, which confirms the set point theory. Few individuals tried weight loss program which had a rebound phenomenon. Around 25% individuals are following some kind of diet for losing weights. But those who are regular in exercise has shown normal weight or few are in the overweight category<sup>9</sup>. Deshpande et al<sup>10</sup> reported 95.7 percent of study population revealed physical activity while Mehan et al<sup>11</sup> reported physical activity in only 45% of study population.

Food habits were not healthy in most of the overweight and obese individuals. Frequency of hotel food is very high in most of the individuals, but junk food is very rare in most of them. Individuals following strict healthy diet were only 3 individuals of all.

#### **Conclusion:**

The result of the study revealed that prevalence of obesity in high economy group of adults is very high ( 60%). The prevalence of obesity is more in females as compared to the males. There was no much difference in the percentage of overweight and obese individuals in different age groups . But prevalence Obesity was more in older age group. Food habits and lack of exercise were risk factors for developing obesity in this group of individuals. No changes in weight were observed in individuals performing mild to moderate exercise. The study reinforces the need of awareness about healthy lifestyle, Proper diet and daily exercise.

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