

# A Study on the Effect of Lifestyle on Cardiovascular Diseases

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**Abstract:** *The present study was conducted to assess the effect of lifestyle on cardiovascular diseases among the patients admitted in the cardiology ward, SUT Hospital, Thiruvananthapuram. The primary data were collected from the patients using a pre-structured interview schedule and secondary data (medical and diet history) from the hospital records. The anthropometric assessments were also taken. The study clearly depicted males above fifty years and those with overweight are more found to be more prone to cardiovascular diseases. Most of the patients were sedentary workers and non vegetarians. It is clear that history of diabetes mellitus, hypertension and hypercholesterolemia are the risk common factors of cardiovascular diseases.*

**Keywords:** Cardiovascular diseases, diabetes mellitus, hypertension, hypercholesterolemia, sedentary lifestyle

## 1. Introduction

Diseases which are caused by the change in lifestyle are known as lifestyle diseases. The trends are showing an increase in such diseases during the last few years. These include osteoporosis, asthma, cardiovascular diseases, cancer, depression etc.

Of these, cardiovascular diseases are one of the most common and dangerous lifestyle diseases. It is a class of diseases that involve the heart and blood vessels and are the leading cause of death globally. (1)

According to American Heart Association (2014), cardiovascular diseases include heart valve problems, arrhythmia, heart attack and stroke. It is estimated that ninety percent of CVD is preventable. It can be accomplished through healthy eating, exercise, avoidance of tobacco smoke and limiting alcohol intake. (1)

Hence, the present study was conducted among the cardiac patients admitted in SUT Hospital, Thiruvananthapuram to find out the risk factors of heart diseases, to find out the importance of lifestyle modification in cardiac diseases and to make the people aware of the importance of exercise and diet and the deleterious effects of smoking, alcoholism etc.

## 2. Materials and Methods

The area selected for the study was Sree Uthradam Thirunal Hospital, Pattom, Thiruvananthapuram. This area was selected because of convenience, easy approachability and the support offered by the hospital staff. The samples were the patients admitted in the cardiology ward. 25 samples were taken for study.

The primary data were collected from the patients using a pre-structured interview schedule and secondary data were collected from the hospital records. The medical and diet history of the patients were collected. The height and weight were also taken. The parameters were taken for the study were age, sex, type of activity, BMI, type of food consumed, level of oil consumption, habit of smoking and alcoholism

and history of disease like diabetes mellitus, hypertension etc.

## 3. Result and Discussion

It was found that males, especially above 50 years are the group more affected by cardiac disease. The incidence of diseases increases with age, having peak at middle age around fifty to fifty five years and morbidity is twice as high in men as in women. (Table I). Disease onset is typically seven to ten years earlier in men as compared to women. (3). Mean Body Mass Index of the subjects revealed that majority (68%) belonged to overweight category. 28 percent with normal BMI and no obese were found. (Pie chart Fig1) Cardiac complaints are found commonly in sedentary workers. Out of the given samples, 22 were sedentary workers. (Table II).

It is clear from the study that 60 percent had no habit of regular exercise, but 40 percent had. 96 percent of the samples were non vegetarians and only 4 percent were vegetarians. 64 percent of the samples used coconut oil and 36 percent used refined oils or other vegetable oils. According to Sreelekshmi (2006), Coconut oil contain high amount of saturated fat, the high intake of which may increase plasma cholesterol. Of the samples, 28 percent used fried foods regularly and 56 percent used both steamed and fried foods. The level of cholesterol of 72 percent of the samples was found to be in normal range, 28 percent had hypercholesterolemia. Of the samples 48 percent were smokers. Some had stopped smoking after the diagnosis of heart disease. 36 percent had the habit of both smoking and alcoholism and 16 percent were found to be non-alcoholics and non-smokers. It is noted from the result that every sample had either diabetes or hypertension or both irrespective of their age, sex, or lifestyle. (Graph Fig2) Life style diseases have already become the number one killer in India, and this is due to increased consumption of tobacco, dietary consumption of fat, particularly saturated fat, lack of physical activity and inadequacy of stress coping mechanism (Arciero et al., 2004).

#### 4. Tables and Figures

##### 1) Age and Sex

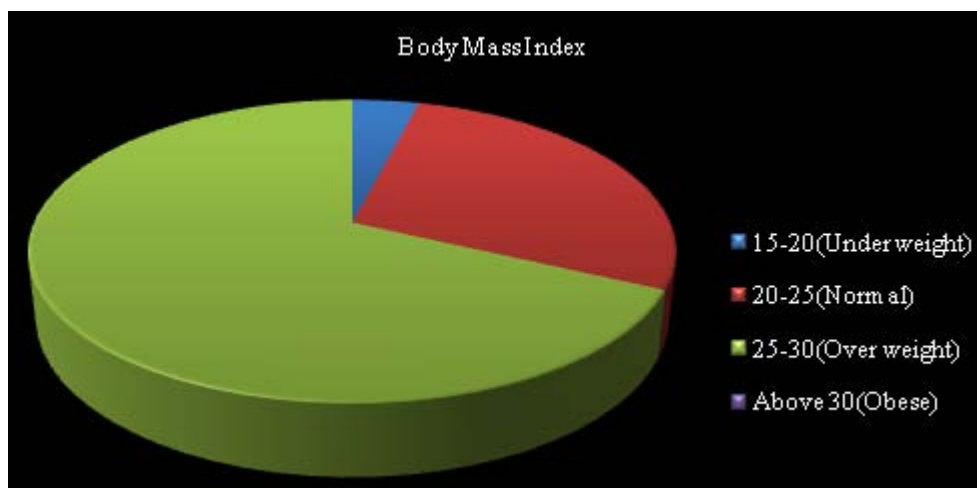
Age Group	Male	%	Female	%
20-30	1	4	-	-
30-40	-	-	-	-
40-50	3	12	1	4
Above 50	18	72	2	8

##### 2) Physical activity

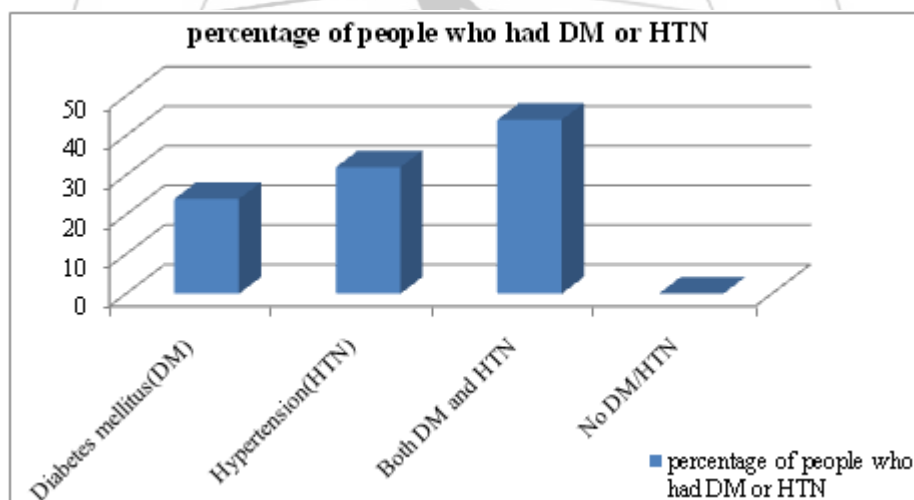
No. of samples: 25

Type of Activity	No. of Samples	%
Sedentary	22	88
Moderate	3	12
Heavy	-	-

##### 3) Body Mass Index (BMI)



##### 4) History of disease



#### 5. Conclusion

Lifestyle related diseases have been increasing and accounting for more than 16 percent of all deaths. Nowadays, the first prevalent cause of death is heart attack. Control of risk factors such as high cholesterol, high blood pressure, diabetes mellitus, smoking etc reduces mortality and morbidity from heart diseases. Physical exercise in moderation and a lipid lower in diet are vital factors in the prevention of heart diseases. It is very important to impart regular and proper awareness and dietary intervention programmes to the public.

#### References

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