

**'A cross sectional study: Assessment of risk factors for heart diseases among urban population of a selected community, Mumbai.'**



*\*Ms. Seema Samudre,*  
Lecturer,  
P. D. Hinduja College of Nursing, Mumbai.

*\*\*Ms. Siman Xavier.*  
Asso. Professor,  
P. D. Hinduja College of Nursing, Mumbai.  
*simanxavier@yahoo.co.in*



**INTRODUCTION**

Cardiovascular disease (CVD) is among the leading causes of mortality & morbidity worldwide. The burden of non-communicable disease in India is rising leading to economic burden. It is estimated that by 2020 cardiovascular disease will be the cause of over 40 % deaths in India as compared to 24 % in 1990. Another worrying fact for cardiovascular disease is that it significantly affects people between the ages 25 and 69 which means losing more productive people to these diseases. Research efforts have identified many risk factors that can contribute to the development of cardiovascular disease (CVD) and most of the risk factors for CVD such as smoking, physical inactivity, obesity is considered to be largely modifiable, which means many deaths and disabilities due to CVD could be prevented.

Clinical trials have demonstrated that when the modifiable risk factors are treated and corrected, the chances of heart diseases occurring can reduce. Present study attempts to assess & update the prevalence of important heart disease risk factors among urban population of selected community, India.



**PROBLEM STATEMENT**

A cross sectional survey to assess risk factors for heart diseases among urban population of a selected community, Mumbai.

**OBJECTIVES**

1. Conduct the survey and assess the risk factors for heart diseases among urban population of a selected community.
2. Identify the prevalence of risk factors for heart diseases among urban population of a selected community.

**METHODOLOGY:**

A cross sectional survey design was adopted for the study. Study subjects were selected using a non-probability convenient sampling method. Total 120 community people participated in this survey. A structured questionnaire was used for the data collection consisting of Part 1: Demographic profile (age, gender, education, occupation status, marital status, cardiovascular history, and family history),

Part 2: Structured questionnaire on assessment of selected modifiable risk factors (food frequency, Smoking, alcohol consumption, Physical activity, stress, sleep pattern), and Part 3: Measurement: BP (Blood Pressure), BMI (Body Mass Index), Waist Hip ratio. (Body weight was measured with the subject standing still on the weighing scale, feet about 15 cm apart and weight equally distributed on each leg. Subjects

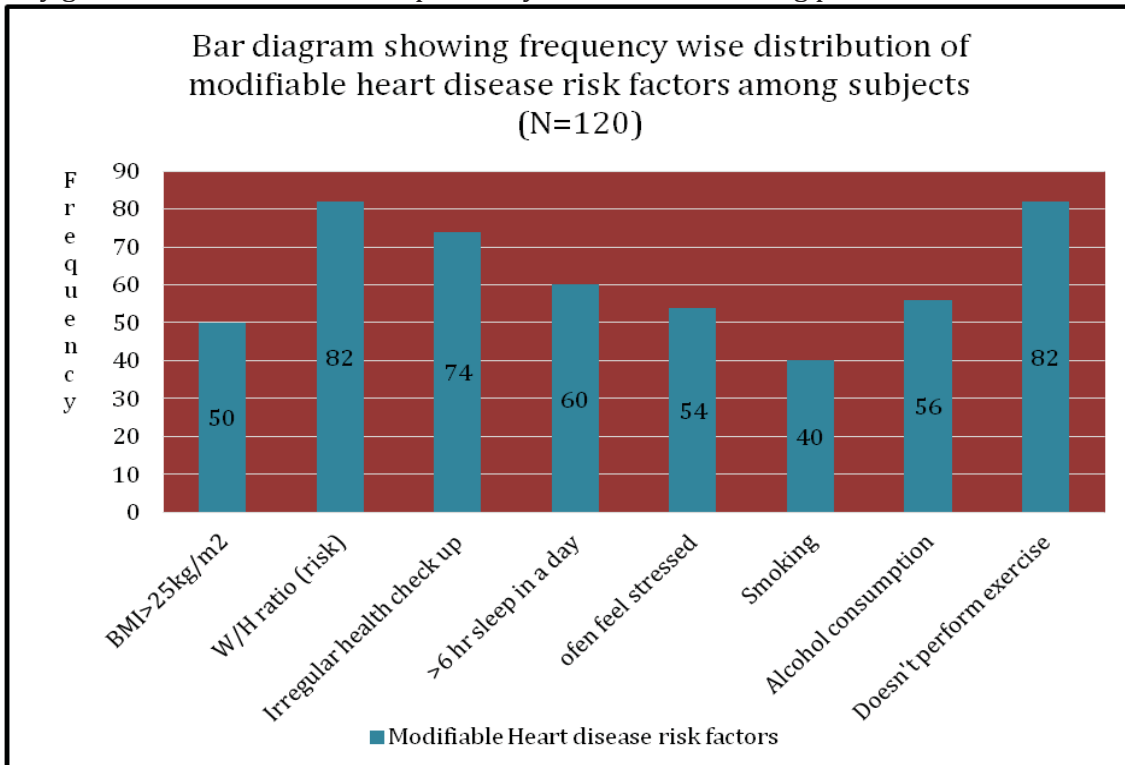
were instructed to wear minimum outerwear and no footwear while their weight was being measured. Height was measured using a measuring tape with the subject in an erect position against a vertical surface. Body mass index was calculated by dividing the weight (in kilograms) with the square of height (in meters). Standard classification of obesity was used for the categorization).

**FINDINGS:  
DEMOGRAPHIC PROFILE:**

Majority of the subjects (f:69, 57.5%) participated in this study belong to the age group of 40-59 years. 43 (35.83%) subjects reported as a known case of CVD & 44(36.66%) subjects reported as a known case of DM. 42 (35%) study subjects reported family history for CVD.

*CVD modifiable risk factor analysis:*

In the risk factor analysis, it is seen that 50 subjects' (41.66%) BMI is more than 25kg/m<sup>2</sup>, indicative of overweight and obesity. 82 (68.33%) of the study subjects Waist Hip Ratio is more than a normal range. 82 (68.33%) study subjects reported that they don't follow regular exercise pattern, 46.66% of the sample has alcohol drinking habit, only 46 subjects (38.33% ) of them follow regular health checkup pattern. 54 (45 %) subjects reported that they often feel stress and 60 (68.18%) subjects reported that they get less than 6 hours of sleep in a day due to their working pattern.



Bar diagram showing frequency wise distribution of modifiable heart disease risk factors among subjects.



Cardiovascular diseases are lifestyle disease and can be prevented through health promotion approach of lifestyle modification. In this study, it is seen that many risk factor like smoking, alcohol consumption, irregular health checkup and exercise pattern, overweight and obesity, stress, are prevalent in the community. Assessment of risk factors for heart disease through such survey will be a guide to evaluate the healthy heart environment status of community. Measures on primordial and primary prevention of such risk factors need to be strengthened.

## REFERENCES

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