

PREVALENCE OF OBESITY AND HYPERTENSION AMONG HEART FAILURE SUBJECTS IN COIMBATORE POPULATION

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ABSTRACT

Background: Heart failure is characterized by the heart's inability to pump an adequate supply of blood to the heart. Without sufficient blood flow, all major body functions are disturbed. Heart failure is an important cause of morbidity and mortality.

Objectives: The study's primary objective was to find out the prevalence of obesity and hypertension among heart failure subjects by using BMI and sphygmomanometer.

Subjects and Methods: A survey study was used. A total of 213 heart failure subjects are selected according to the inclusion criteria. 200 subjects are included in the study with their cooperation. Out of which 122 subjects have obesity, 58 subjects have hypertension and 20 subjects have both obesity and hypertension. The participants age ranged between 35-50 years. Each subject was evaluated by anthropometric measures such as weight, height to calculate body mass index to determine obesity. Blood pressure was measured by using sphygmomanometer and Rose angina questionnaire were used to detect chest pain. The questionnaire method adopted was non-invasive and inexpensive. Duration of this study was 6 months. Obtained data were analyzed.

Result: A total of 200 subjects are included in this study, 65 females (60.5%) and 135 males (39.5%). Out of 200 heart failure subject 122 subjects were selected due to obesity, 58 subjects were selected due to hypertension and 20 subjects were selected due to both obesity and hypertension. Each subject was evaluated by anthropometric measures such as weight, height to calculate body mass index to determine obesity. Blood pressure is measured by using sphygmomanometer and Rose angina questionnaire is used to detect chest pain. 56 males and 66 females are detected obesity. the females have a higher prevalence of obesity compared to the males. The total number of heart failure subject with obesity is 122. Hypertension is detected in 49 males and 9 females. The males have a higher prevalence of hypertension compared to the females. The total number of heart failure subject with hypertension is 58. Several 15 males and 5 females have detected both obesity and hypertension so the males have a higher prevalence compared to the females. The total number of heart failure subject who have both obesity and hypertension is 20.

According to this study, the prevalence of heart failure due to obesity is 61%, hypertension 29% and both obesity and hypertension is 10%. It shows the study prevalence of subject with heart failure due to obesity is more compared to subjects with heart failure due to hypertension and both hypertension and obesity.

Conclusion: Obesity and hypertension are not only the risk factors of heart failure but these increases the risk of heart failure. Obesity shows more prevalence compared to other risk factors of heart failure.

KEYWORDS: Heart Failure, Obesity, Body Mass Index, Hypertension, Sphygmomanometer, Rose Angina Questionnaire

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