



To Assess the Knowledge Regarding Heart Healthy Diets and Endurance Exercise Among Cardiac Patients at Selected Hospitals in Coimbatore District

¹ Anitha Grace Peace raj, ² G.Nandhini

¹ Ph. D scholar, Shri Jagdishprasad Jhabarmal Tibrewala University (JJTU), HOD and Professor Of Ganga Institute Of Health Sciences

² HOD and Professor, Department of Clinical Nutrition, Ganga Institute of Health Sciences, Coimbatore - 641022
Email - ¹anithagrace1234@gmail.com, ² nandhinigovinthan123@gmail.com.

Abstract: *Background:* Cardiovascular diseases are of the leading causes of morbidity and mortality globally. The adoption of heart healthy diets and regular endurance exercises are critical in preventing and managing cardiovascular diseases. However, the level of knowledge among cardiac patients regarding these prevention measure is not well understood. **Aims and objectives:** This study aimed to assess the knowledge regarding heart healthy diets and endurance exercise among cardiac patients at selected hospitals in Coimbatore. **Material and methods:** A Descriptive study was conducted among cardiac patients at selected hospitals in Coimbatore district. This design was adopted to assess the knowledge regarding Heart Healthy Diets and Exercise among cardiac patients. A total of 50 cardiac patients were surveyed using structured questionnaire. The questionnaire was assessed the participants understanding of heart healthy dietary practices, exercise routines, adopting such lifestyle changes. Descriptive statistics were used to analyze the data. **Results:** The study found that majority 56.7 % of patients had inadequate knowledge on heart healthy diets and endurance exercises, barriers to adopting lifestyle changes and there was significant association between level of knowledge and Selected demographic variable. **Conclusion:** The results suggested that while some cardiac patients have adequate knowledge regarding heart healthy diet and endurance exercise, there is significant gaps in understanding and practice. Educational interventions are needed to improve patient's awareness and adherence to heart healthy diets and lifestyle changes, which could play a crucial role in preventing further cardiovascular complications.

Key words: Cardiac Patients, Heart Healthy Diets, Exercise.

1. INTRODUCTION:

“Diet and exercise are two eyes for perfect health” - Anna billy

Exercise and diet plays a vital role in the maintenance of good health and in the prevention and cure of disease. The human body builds up and maintains healthy cells, tissues, glands and organs only with the help of various nutrients. The body cannot perform any of its functions, be they metabolic, hormonal, mental, physical or chemical, without specific nutrients. The food which provides these nutrients is, thus, one of the most essential factors in building and maintaining health. The other essential factor is, these nutrients must also be appropriately utilized by the body through the exercise. The cardiovascular disease is one of the leading diseases in the world. Cardiovascular disease refers to the class of diseases that involve the heart and blood vessels (arteries and veins). While the term technically refers to any disease that affects the cardiovascular system, it is usually used to refer to those related to atherosclerosis. These conditions have similar causes, mechanisms and treatments. The cardiovascular disease is mainly caused by dietary pattern and physical exercise. Attempts to prevent cardiovascular disease take the form of modifying risk factors such as gender, age and family history, cannot be modified. Also important is a low-fat, low-calorie diet, which helps one to maintain a healthy body mass index (BMI) and preventing obesity. Regular cardiovascular exercise (aerobic exercise) complements the healthful eating habits. Sometimes, the combination of diet and exercise will improve lipoprotein (cholesterol) levels. Proper nutrition is as important to health as exercise. When exercising, it becomes even more



important to have a good diet to ensure that the body has the correct ratio of macro-nutrients while providing ample micro-nutrients, in order to aid the body with the recovery process following strenuous exercise.

The cardiac diet was set up for people who are at a high risk of developing a heart condition such as a heart attack. It is an individualized, healthy eating plan that is tailored to a person's specific needs by a dietitian. It can also be used by anyone as a preventive measure. The diet comes with some specific guidelines.

1.1. Statement of the Problem:

A study to assess the knowledge regarding Heart Healthy Diets and exercises among cardiac patients in selected hospital in Coimbatore.

1.2. Objectives of the Study:

- 1.To assess the knowledge on Heart Healthy Diets and exercise among cardiac patients.
- 2.To associate the knowledge Heart Healthy Diets and exercise among cardiac patients with their selected demographic variables.

2. MATERIALS AND METHODS:

Descriptive research approach, non-experimental descriptive survey design was adopted for the study. This design was adapted to assess the knowledge regarding Heart Healthy Diets and exercise among cardiac patients.

2.1. Tools for Data Collection:

After an extensive review of literature and discussion with experts the structured interview schedule was used to assess the knowledge regarding Heart Healthy Diets and exercises among cardiac patients. It was felt that face to face contact would encourage the subjects to give prompt information and will help in collecting data from illiterate subjects. A Structured questionnaire, with multiple choice questions to assess knowledge of heart healthy diets. (heart healthy foods, nutritional restriction, importance of specific nutrients), Knowledge of endurance exercise (benefits of aerobic activity, types) exercises, recommended duration and intensity)

2.2. The structured interview schedule consists of two sections:

Section A: This section includes assessing the demographic variables.

A demographic variable includes age, sex, religion, occupation, Marital status.

Section B: - This section includes structured questionnaire with multiple choice questions to Assess the heart healthy diets and exercise

This includes 17 structured questions. Each correct answer was awarded a score of '1' mark and each wrong answer is given the score of '0'. The maximum score of this structured interview schedule was 17. The resulting score was interpreted as follows

Inadequate knowledge - <51%

Average knowledge -51-75%

Adequate knowledge - >75%

2.3. Ethical consideration:

- Oral consent of each samples was obtained
- The subjects were assured confidentiality would be maintained on information
- The subjects were informed that their participation was voluntary, had the freedom to withdraw from the study.
- Statistical analysis

3. RESULTS:

Results of the study revealed that, regarding age the majority of the cardiac patients 17 (33.3%) belongs to greater than 65 years, 13 (26.7 %) of cardiac patients belongs to 36-45 years, 12(23.3%) of cardiac patients belongs to 46-55 years and 8 (16.7%) minority of cardiac patients belongs to 55-65 years, and most of them are males 35 (70%) and 15 (30%) of them belongs to females.

In relation to religion, majority of the cardiac patients 18 (36.7%) belongs to Hindu, 10(20%) of them were Christian, 13 (26.7%) of them were other religion and 8 (16.7%) minority of them were Muslim, and majority of cardiac patients 22 (43.3%) were self-employees, 12 (23.3%) of cardiac patients were unemployed, 10 (20%) of cardiac patients were private and 4 (13.3%) of cardiac patients were government employee.



Regarding the Duration of illness, most of the cardiac patients 23 (46.7%) were less than one year, 12 (23.3%) were one to five years and rest of the cardiac patients were 15 (30%) were greater than five years.

With regard to the source of previous information, majority of cardiac patients 18 (36.7%) got information through newspaper, 8 (16.7%) of cardiac patients got information through friends, 6 (20%) of cardiac patients got information through relatives and 13 (26.7%) of them got information through health care professionals

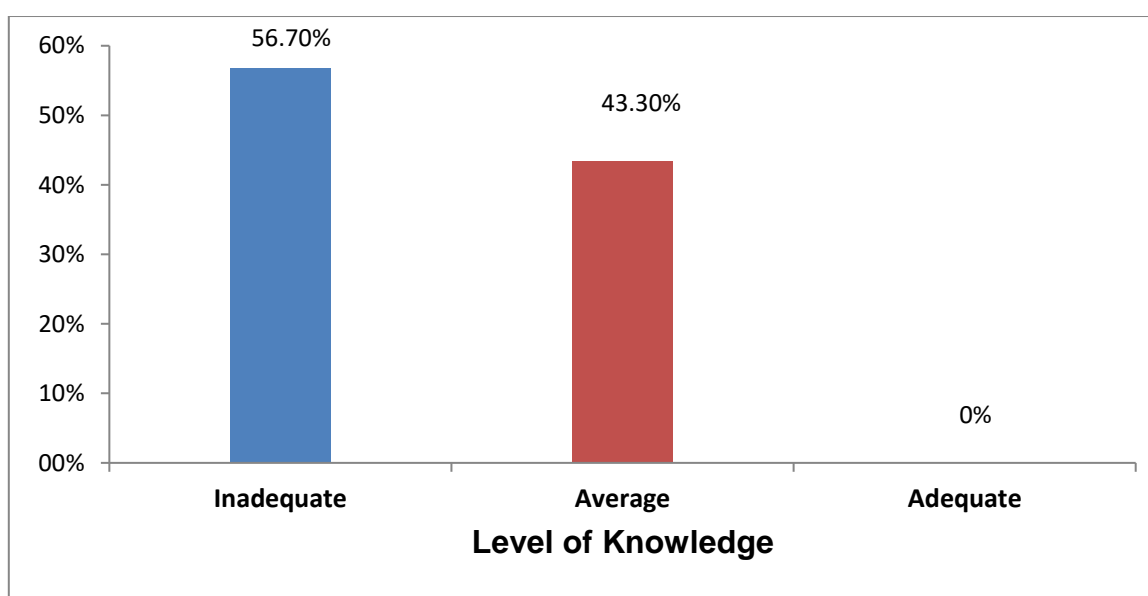
. For the association of level of knowledge regarding therapeutic diet and exercise among cardiac patients with their selected demographic variables. Chi-square test was used to examine the association between levels of knowledge and selected demographic variables. In relation to demographic variables age, sex, religion and duration of illness of cardiac patients were found to be invariably not significant in association with level of knowledge regarding therapeutic diet and exercises among cardiac patients at 5%, 1% and 0.1% P level i.e. $P < 0.05$, $P < 0.01$ and $P < 0.001$ respectively but demographic variables occupation and source of previous information were found to be invariably significant in association with level of knowledge among cardiac patients at 5% P level i.e. $P < 0.05$. It is evidence that occupation and source of previous information was significantly associated with level of knowledge and remaining demographic variables were not significantly associated with level of knowledge regarding therapeutic diet and exercise among cardiac patients.

4. DISCUSSION:

Distribution of demographic variables revealed that out of 50 cardiac patients' majority of the cardiac patients 17 (33.3%) belongs to greater than 65 years. With regard of sex most of them are males 35 (70%) and 15 (30%) of them belongs to females. In relation to religion, majority of the cardiac patients 18 (36.7%) belongs to Hindu. With Regards to occupation majority of cardiac patients 22 (43.3%) were self-employees. Duration of illness, most of the cardiac patients 23 (46.7%) were less than one year. With regard to the source of previous information, majority of cardiac patients 18 (36.7%) got information through newspaper, 8 (16.7%) of cardiac patients got information through friends, 15 (20%) of cardiac patients got information through relatives and 13 (26.7%) of them got information through health care professionals.

The First Objective Was To Assess The Level Of Knowledge Regarding Heart Healthy Diet And Exercise Among Cardiac Patients

The level of knowledge was assessed wherein a majority of 28 (56.7%) inadequate level of knowledge, whose score ranged between $<50\%$, 22 (43.3%) had moderate knowledge, whose score range was less than 51-75. The mean knowledge score obtained by the respondents were 8.1 with SD 2.13. This indicates that the knowledge level of cardiac patients regarding therapeutic diet and exercise is only below average and they need more information on therapeutic diet and exercise.





The Second Objective Was To Find Out The Association Between The Knowledge Levels Of Cardiac Patients With Their Selected Demographic Variables

Association of demographic variables with the knowledge level of cardiac patients was done using chi square test. It was found that there is significant association between knowledge level of respondents on therapeutic diet and exercise and demographic variable – occupation and source of previous information. Other variables such as age, sex, religion and duration of illness were not associated with the knowledge level of therapeutic diet and exercise among cardiac patients. Hence the research hypothesis H1 stated as “There is a significant association between the levels of knowledge regarding therapeutic diet and exercise among cardiac patients with their selected demographic variables” was accepted.

5. LIMITATION:

The study was limited to cardiac patients only.

The study limited to the participants who are all present at the time of study.

The study limited to 50 patients

6. CONCLUSION:

The level of knowledge was assessed wherein a majority of 28(56.7%) had inadequate level of knowledge, 22 (43.3%) had average level of knowledge and no one is having the adequate knowledge. The mean knowledge score obtained by the respondents were 8.1 with SD 2.13. This indicates that the knowledge level of patients on Heart healthy diet and exercise is only inadequate and they need more information on therapeutic diet and exercise.

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