A study to assess the knowledge regarding life style modifications among patients with coronary artery disease in NMCH, Nellore

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Abstract
Background: Coronary Artery Disease is a type of blood vessels disorder that in included in the general category of atherosclerosis. The Coronary Artery Disease (CAD) otherwise known as ischemic heart disease atherosclerosis of the coronary artery disease reduces blood flow to the heart. Coronary Artery Disease is caused by the build-up of fatty substances such as cadatal that collect along the lining of the coronary arteries in a process known as atherosclerosis. 

Aim: The aim of the study was to assess the knowledge regarding life style modifications CAD patients.

Objectives: 1. To assess the level of knowledge regarding life style modifications among patients with CAD. 2. To associate the level of knowledge regarding life style modifications among patients with CAD with social demographic variables.

Methodology: 100 CAD patients admitted in Narayana Medical College Hospital, Nellore were selected by using Non-probability convenience sampling technique method.

Results: Regarding the level of knowledge regarding life style modifications patients with CAD, 39 (39%) had poor knowledge, 50 (50%) had average knowledge and 11 (11%) had good knowledge.

Keywords: Knowledge, life style modifications, coronary artery disease, patients

Introduction
Coronary Artery Disease is a type of blood vessels disorder that in included in the general category of atherosclerosis. The Coronary Artery Disease (CAD) otherwise known as ischemic heart disease atherosclerosis of the coronary artery disease reduces blood flow to the heart. Coronary Artery Disease is caused by the buildup of fatty substances such as cadatal that collect along the lining of the coronary arteries in a process known as atherosclerosis [1]. Cardiovascular Disease is the major cause of death in the all over the world. Coronary artery disease in the most common type of cardiovascular disease in the more account of deaths, coronary artery disease patients with asymptomote or develop chronic stable angina, unstable angina and myocardial infarction (MI) are more serious manifestation of coronary Artery Disease and are termed acute coronary syndrome [2].

The American Heart Association estimates that 1.2 million Americans will have an myocardial will die in an emergency department, although the mortality rate from myocardial infarction (MI) decreased by 26.3% between 1999 and 2002 due to advances in treatment, it remains the leading cause of all cardiovascular disease deaths and deaths in general, its prevalence in urban population increased from 3.5% in 1960S to 10.5% in 1990S and the corresponding changes for the rural population was from 2-4% the rate appear to be height in South India, has been Estimated that India had the height number of death in the world because of coronary artery disease in 2002 nearly 1.5 will ion and which is expected to double by 2015 [3].

Risk factors have been associated with coronary artery disease they can be categorized as modifiable and non-e modificable risk factors include elevated seromlipids, HTN, tobacco use physical in Activity, obesity, diabetics, metabolic syndrome, psychological status and homocysteine level, non-modifiable risk factor include age, gender, ethniary, family history and genetic inheritance [4]. Coronary artery disease can be controlled through life style modification through healthy life style habits, exercise diet, aptitude through the exercise and reduction of salt & sodium intake we can improve the quality of life [5].
Need for the study
Cardiovascular disease in the words leading caller accounting for 16.7 million or 29.2% of total global death in 2003. Heart attack victims are just the first wave of swelling population of Asians with heart problems. Cardiovascular disease related deaths now occur in nations which cover countries in Asia. In India the past decades rates of Coronary disease among urban population have risen from 4% to 11%, According to study 60% of the world’s heart patients reside in India and by 2010. It is expected to hit more patients added to that it is stating that 137% of men and 120% women in developing countries are susceptible for getting heart disease condition in the wake of 2020 [6]. The major reason attributed for this rising number of patients include diet, low in poly unsatisfied fatty acids, cigarette smoking, alcohol abuse, poor stress management and it also pointed out to the fact that the cardiac health monitoring system prevalent in our country must also sweet to detect cardiac ailments in an early stage [7]. The overall prevalence rate of coronary artery disease is 11% the prevalence rate of coronary artery disease were 9.1%, 14.9% and 21.4% prevalence of coronary artery disease increased with an increase in total 26.2, *P* < 0.001, rising rapidly in urban India, life style modification and aggressive control of risk factors are urgently needed to revise the trend, poor diet, 100 physical actively not common risk factors for heart disease. The sole of diet and nutrition in influenced by a range of social cultural, economic and physiological factor, over weight and obesity are estimated risk factors for heart disease [8]. Epidemiological date from at least 20 countries is North America, Europe, Asia and Australia, demonstrate a 29% to 40% lower coronary artery disease incidence among drinkers compared with non-drinkers, moderate drinkers exhibits lower rate of coronary disease related mortality then both Healy drinkers and abstain Diet in one of the strongest influences on coronary artery disease related death among men ages 50 to 70 international comparisons, laboratory data, and prospective studies suggest that diets high. In saturated fats and increases the risk factors for coronary artery disease, epidemiological data suggest that moderate drinkers may concuss less fat and cholesterol than heavy drinkers and abstainers potentially accounting for a portion of the lower coronary artery disease risk associated with alcohol [9].

Statement of the problem
A study to assess the knowledge regarding life style modification among patients with coronary artery disease in NMCH, Nellore.

Objectives

- To assess the level of knowledge regarding life style modification among patients with coronary artery disease.
- To associate the level of knowledge regarding life style modification among patients with coronary artery disease with their selected demographic variables.

Delimitations

- The coronary artery disease patients in Narayana Medical College and hospital.
- Patients willing to participate in the study.
- The sample size of 100.

Methodology
Research Approach
A quantitative approach was adopted to determine the research study.

Research Design
The present study was conducted by using descriptive research design

Setting of the study
The study was conducted at Narayana Medical College Hospital, Nellore.

Target population
The patients who are all admitted in Cardiology ward, ICU, and attained Cardiology OP in Medical College Hospital, Nellore.

Accessible population
The accessible population for the present study was diabetic patients admitted in Narayana Medical College Hospital, Nellore and who fulfilled the inclusion criteria.

Sample size
The samples consist of 100 CAD patients.

Sampling technique
Non-probability convenience sampling technique was adapted for the study.

Criteria for sampling selection
Inclusion criteria

- The coronary Artery Disease patients those who are admitted in cardiology wards, ICU, and attained Cardiac OP in NMCH, Nellore.
- The CAD patients includes both males & females.

Exclusion criteria

- Those CAD patients who were not present during the time of data collection.
- The CAD patients those who were not willing to participate in the study.

Description of the tool
Part-I
Socio demographic variables. It includes age, sex, educational qualification, marital status, source of knowledge, religion and family members influencing were on knowledge.

Part-II
It deals with structured questionnaire formulated to assess the knowledge regarding life style modifications among patients with coronary artery disease in NMCH, Nellore.

Data analysis and discussion

Table 1: Frequency distribution of level of knowledge on life style modifications among patients with coronary artery disease (N=100)

<table>
<thead>
<tr>
<th>Level of Knowledge</th>
<th>Frequency (F)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor knowledge</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>Average knowledge</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Good knowledge</td>
<td>11</td>
<td>11</td>
</tr>
</tbody>
</table>
Fig 1: Percentage distribution of level of knowledge life style modifications among patients with coronary artery disease

Table 2: Mean and standard deviation of knowledge score among CAD patients (N=100)

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Mean</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
<td>CAD patients</td>
<td>10.61</td>
<td>5.19</td>
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</table>

Major findings of the study

- Regarding the level of knowledge regarding life style modifications patients with CAD, 39 (39%) had poor knowledge, 50 (50%) had average knowledge and 11 (11%) had good knowledge.
- The mean knowledge score of patients was 10.61 and standard deviation was 5.19.
- Regarding association with demographic variables, age, sex, education and religion had significant association with level of knowledge at $P<0.05$ level.

Conclusion

The study concluded that half of the CAD patients, 50(50%) had average knowledge regarding life style modifications patients with Coronary artery disease.

References