Knowledge on prevention of ischemic heart disease among adults in Narayana medical college and hospital, Nellore, A.P.

Manasa M, Latha P and Dr. Indira Arumugam

Abstract

Background: Ischemic heart diseases are leading cause of death and primary cause of attacks and strokes. Heart disease is a disease characterized by increased from 3.5% and corresponding changes for the rural population was from 12.4%. There rate appears to the highest in south India. It has been estimated that the India had the highest number of death in world because of ischemic heart disease 2014 nearly 17.5 million.

Aim: The aim of the study was to assess the Knowledge on prevention of ischemic heart disease among adults.

Objectives: 1. To assess the knowledge on prevention of ischemic heart disease among adults. 2. To find out the association between the knowledge on prevention of ischemic heart disease among adults with selected socio demographic variables.

Methodology: 50 adults were selected from Narayana Medical College and Hospital, Nellore by using non-probability purposive sampling technique.

Results: The results shows that, regard to level of knowledge among adults, 1(2%) had A grade, 4(8%) had B+ grade, 8(16%) had B Grade, 9(18%) had C grade and 28(56%) had D grade.

Keywords: Knowledge, prevention, ischemic heart disease, adults

Introduction

Ischemic heart diseases are leading cause of death and primary cause of attacks and strokes. Heart disease is a disease characterized by increased from 3.5% and corresponding changes for the rural population was from 12.4%. There rate appears to the highest in south India. It has been estimated that the India had the highest number of death in world because of ischemic heart disease 2014 nearly 17.5 million. Many factors have been associated with ischemic heart disease. They can be categorized as modifiable and non-modifiable factor including elevated serum lipid hypertension, tobacco use, physical inactivity, obesity, diabetic mellitus, family history. The decreased blood flow may not cause ischemic heart disease symptoms. As plaque continues to build up in ischemic heart disease. The signs including chest pain, shortness of breathing, heart attack, indigestion, nausea, sweating reduced blood supply.

The primary prevention of ischemic heart disease is based on managing certain factors that gives healthy people gives increased risk of developing ischemic heart disease. Some of these risk factors are non-modifiable, including age, sex and family history of ischemic heart disease. Including sedentary lifestyle, obesity, stress, smoking, high cholesterol levels, high blood pressure, and diabetes mellitus. Modifying lifestyle, and taking preventative medications, could ultimately help to lower your risk of developing ischemic heart disease. Regular physical activity reduces cholesterol, reduces blood pressure and prevents atherosclerosis.

Secondary prevention stands at the boundary between prevention and treatment cardiologists consider secondary prevention to be treatment of ischemic heart disease. There is a more uniform agreement that prevention of new-onset IHD should be called primary prevention. This article examines some of the major issues currently under scrutiny for primary prevention of IHD. Secondary prevention of ischemic heart disease by comprehensive risk factor modification reduces mortality, decreases subsequent cardiac events, and improves quality of life. Options for secondary prevention include medical therapy and surgical intervention.
Need for the study
The global burden disease study estimation of age standardized ischemic heart disease death rate off 3372 per 10,000 population in India is higher than global average off 3355 per 20,000 population. American Heart Association (2015) estimates 1.2 million people will have ischemic heart disease annually and about 1/4 of these will an emergency department of before reaching the hospital. Although mortality rate of ischemic heart disease increased by 26.33% between 2007 and 2016, due to ischemic heart disease.

World Health Organization (2017) estimates that there will be about 20 million death in 2016, 2007 death in 30%. statics shows that throughout the population 1,5250 where affected with ischemic heart disease. The world health statistics has reported the prevalence of major ischemic heart disease in India 32% adult death in 2014-2016, in India studies have reported increasing ischemic heart disease prevention over the age from 60 years 5% to 4-6% in rural population 15% to 9-10% in urban population. Another study of 45% villages in rural on Andhra Pradesh showed that ischemic heart disease was the leading cause of mortality accounting for 32% of all death. National Health Survey (2017) ischemic heart disease among adults >18 year of age overall rate of 70% age were estimation to be 15.2% the religion with the highest rate with is the midset 20.7% and the state with the highest percentage was in India 26.7% the lowest percentage virginal 13.1% and by the state in Utara Pradesh 9.7%.

Priyanka Chouhan and Drveena (2017) A study to assess the knowledge on prevention of ischemic heart disease among adults >18 year of age overall rate 70% age were estimation to be 15.2% the religion with the highest rate with is the midset 20.7% and the state with the highest percentage was in India 26.7% the lowest percentage virginal 13.1% and by the state in Utara Pradesh 9.7%.

Problem Statement: A study to assess the knowledge on prevention of ischemic heart disease among adults in Narayana Medical College and Hospital, Nellore.

Objectives
- To assess the knowledge on prevention of ischemic heart disease among adults.
- To find out the association between the knowledge on prevention of ischemic heart disease among adults with selected socio demographic variables.

Delimitations
Study is delimited to;
- Adults admitted in Narayana Medical College And Hospital, Nellore
- A sample size of 50
- Two weeks of the data collection period only

Methodology
Research Approach
Research Approach: Quantitative Research Approach
Research Design: Descriptive design.

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

Population
Target population: The target population was included all adults in Narayana Medical College Hospital.

Accessible population: The accessible population was adults between 18-60 years admitted at Narayana Medical College Hospital, Nellore.

Sample: The sample for the present study includes adults in Narayana Medical College and Hospital at Nellore who fulfills the inclusion criteria

Sampling Technique: Non probability convenience sampling technique was adopted to select samples.

Sample Size: The sample size for the present study was 50 adults

Criteria for Sample Collection
Inclusion criteria:
- The adults admitted in Narayana Medical College Hospital, Nellore.
- The adults are willing to participate in this study
- The adults who were available at the time of data collection

Exclusion criteria
- The adults who are not willing to participate in this study
- The adults who were not available at the time of data collection

Variables of the Study
Independent variable: Adults.
Dependent variable: Level of knowledge.
Socio demographic variables: The socio graphic variables of adults such as age, gender, educational status, occupation, family income per month.

Description of the tool: The tool was divided in to 2 parts
PART-I: It deals with the socio demographic variables like age, gender, educational status, occupation, family income per month.
PART-II: It deals with structured questionnaire to assess the level of knowledge on prevention of ischemic heart disease.

Data Analysis & Discussion

<table>
<thead>
<tr>
<th>S. No</th>
<th>Level of Knowledge</th>
<th>Frequency (F)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A+</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>B+</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>3.</td>
<td>B</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>4.</td>
<td>C</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>5.</td>
<td>D</td>
<td>28</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Table No – 1 shows that with knowledge on ischemic heart disease among 50 adults, 1(2%) had A grade, 4(8%) had B+ grade 8(16%) had B Grade 9(18%) had C grade and 28(56%) had D grade.
Fig 1: Percentage distribution of adults based on level of knowledge.

Table 2: Mean and standard deviation of knowledge score of among adults. (N=50)

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Knowledge</td>
<td>15.24</td>
<td>4.66</td>
</tr>
</tbody>
</table>

Table-2: shows that the mean knowledge score was 15.24 and standard deviation was 4.66.

Table 3: Association between the level of knowledge and selected demographic variables among adults. (N=50)

<table>
<thead>
<tr>
<th>S. No</th>
<th>Demographic Variables</th>
<th>A</th>
<th>B</th>
<th>B+</th>
<th>C</th>
<th>D</th>
<th>Chi-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>1.</td>
<td>Age</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>a. 20-30 years</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>b. 31-40 years</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>c. 41-50 years</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>d. 51-60 years</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>a. Male</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>b. Female</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>Education</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>a. No formal education</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>b. Primary</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>c. Secondary</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>d. Graduate</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>4.</td>
<td>Type of Family</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>a. Joint Family</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>b. Nuclear Family</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>c. Extended Family</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Major findings of the study
- Regarding level of knowledge 1(2%) A grade, 4(8%) had B+ grade, 8(16%) had B grade, 9(18%) had C grade, and 28(56%) had D grade.
- Mean knowledge score was 15.24 and standard deviation was 4.66.
- Among all the demographic variables, age, gender, education, and type of family had significant association with level of pain at P<0.001, P<0.01 & P<0.05 level respectively.

Conclusion
The study concluded that majority of the adults, (56%) had D grade i.e. below average knowledge on prevention of ischemic heart disease. The study indicated that all adults need to be educated in detail regarding ischemic heart disease. So that adults can maintain the proper health and can prevent any health related complications on IHD.

References
5. Olive C. Progress in M-protein-based subunit vaccines
to prevent ischemic heart disease Curr Opin Mol Ther. 2007; 9(1):25-34
6. WHO Expert Consultation on ischemic heart disease: report of a WHO Expert Consultation, S 614.05 WHO 923.
7. WHO. A Review of the Technical Basis for the Control of Conditions Associated with Group A Streptococcal Infection. WHO/FCH/CAH/05.08