Knowledge on clinical features and complication of coronary artery diseases among adults in NTR Nagar at Nellore

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Abstract

Background: The human heart is the most crucial and hardest working organ of the body that combines with blood vessels to form the whole cardiovascular system. CVD is caused by disorders of the heart and blood vessels which result in coronary artery disease (CAD), heart failure, cardiac arrest, and sudden cardiac death.

Objectives: 1. To assess the knowledge on Clinical Features and Complication of coronary artery diseases among adults. 2. To find out the association between the knowledge on Clinical Features and Complication of coronary artery diseases among adults with their selected socio demographic variables.

Materials and Methods: The descriptive research design was used to conduct research study. The 30 women were selected by using non probability convenience sampling technique in NTR Nagar at Nellore.

Result: The result reveals that, with regards to level of knowledge regarding Clinical Features and Complication of coronary artery diseases among adults, 19 (63%) had inadequate knowledge, 8 (27%) had moderate knowledge and 3 (10%) had adequate knowledge.

Keywords: Knowledge, clinical features, complications, coronary artery diseases, adults

Introduction

Coronary artery disease (CAD) is one of the most common causes of death worldwide. CAD is responsible for one-third of deaths in developing and developed countries in people over 35 years of age, with the percentage reaching close to 50% in western countries. The worldwide burden is set to reach 47 million disability adjusted life years by the year 2020 as projected by World Health Organization. In the United States alone, there are estimated to be 900,000 subjects who suffered or die from CAD and its complications in 2016. Coronary artery disease (CAD) is a condition that develops due to the accumulation of atherosclerotic plaque in the pericardial coronary arteries leading to myocardial ischemia. It is a common multifarious public health crisis today. Cardiovascular disease is affecting millions of people in both developed and developing countries. Although, the rate of death attributable to the disease has declined in developed countries in the past several decades, it is still the leading cause of death in low and middle income countries, the prevalence of cardiovascular disease has increased dramatically.

The risk factors for CAD are broadly classified as modifiable and non-modifiable risk factors. Modifiable risk factors include hypertension, diabetes mellitus, dyslipidemia, obesity, and smoking. Non-modifiable risk factors include age, sex, race, and family history for CAD. It is closely related to lifestyle and modifiable physiological factors, and risk factor modification has been shown to reduce cardiovascular morbidity and mortality.

The prevalence and incidence of CAD along with the risk factor profile vary greatly across the regions of the world. Regional differences in the prevalence and incidence of Atherosclerotic coronary disease may depend upon the genetic variability, life-style differences and regional differences in the medical care system among others. European Heart Network and European Society of Cardiology estimate that over 4 million people died from CVDs in Europe and 1.9 million people died in European Union (EU) which are 47% and 40% deaths, respectively.
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In 2015, CAD affected 110 million people and resulted in 8.9 million deaths. It makes up 15.6% of all deaths, making it the most common cause of death globally. The risk of death from CAD for a given age decreased between 1980 and 2010, especially in developed countries. The number of cases of CAD for a given age also decreased between 1990 and 2010. In the United States in 2010, about 20% of those over 65 had CAD, while it was present in 7% of those 45 to 64, and 1.3% of those 18 to 45, rates were higher among men than women of a given age.

Statement problem
A Study to Assess the Knowledge on Clinical Features and Complication of Coronary Artery diseases among Adults in NTR Nagar at Nellore.

Objectives
- To assess the knowledge on Clinical Features and Complication of coronary artery diseases among adults.
- To find out the association between the knowledge on Clinical Features and Complication of coronary artery diseases among adults with their selected socio demographic variables

Materials and methods
A quantitative research approach and descriptive research design was used to assess the knowledge regarding Clinical Features and Complication of coronary artery diseases among adults in NTR Nagar at Nellore. The sample includes all Adults who are residing in NTR Nagar. 30 Adults were selected by using non probability convenience sampling technique. With the help of extensive reviews from various text books, net sources and journals, 40 structured questionnaires were developed to assess the knowledge on Clinical Features and Complication of coronary artery diseases among adults. Each correct answer was given by score ‘1’ and wrong answer by score ‘0’. The score interpretation was >75% Adequate knowledge, 55-75% Moderate knowledge and <50% Inadequate knowledge. The tool was sent to nursing experts for content validity. The reliability of the tool ‘r’ value was 0.9. The tool was tested for the feasibility by conducting pilot study among 3 Adults. Prior formal permission was obtained from the institutional ethical committee, Narayana Medical College Hospital, Nellore and permission obtained from the village sarpanch. The samples were informed by the investigator about the purpose of the study and the written consent was obtained. The data collection was carried out 2 weeks. Data was collected by using socio demographic variables and a structured questionnaire was used to measure the level of knowledge on Clinical Features and Complication of coronary artery diseases. It took 15-20 minutes to collect the data from each participant. The data was analyzed and tabulated by using descriptive and inferential statistics based on objectives of the study.

Result and discussion

Table 1: frequency and percentage distribution of level of knowledge regarding Clinical Features and Complication of coronary artery diseases among adults. (n=30)

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
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<tbody>
<tr>
<td>In adequate knowledge</td>
<td>17</td>
<td>57</td>
</tr>
<tr>
<td>Moderate knowledge</td>
<td>10</td>
<td>33</td>
</tr>
<tr>
<td>Adequate knowledge</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Table no-1: Shows that with regards to level of knowledge regarding Clinical Features and Complication of coronary artery diseases among adults, 19 (63%) had in adequate knowledge, 8 (27%) had moderate knowledge and 3 (10%) had adequate knowledge.

Fig 1: Percentage distribution of level of knowledge regarding Clinical Features and Complication of coronary artery diseases among adults.

Table 2: Mean and Standard deviation of knowledge regarding Clinical Features and Complication of coronary artery diseases among adults (n=30)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of knowledge</td>
<td>50.8</td>
<td>14.2</td>
</tr>
</tbody>
</table>

Table no-2: Shows that level of knowledge regarding Clinical Features and Complication of coronary artery diseases among adults mean values is 50.8 with standard deviation of 14.2.

Nursing Implications: The findings of the study have several implications for nursing practice, nursing education, nursing administration and nursing research.

Nursing Practice
- The community health nurse can teach the adults about the modifiable and non modifiable risk factors of CAD.
- The community health nurse can educate the adults about the preventive measures of coronary artery diseases.
Nursing Education
- Mass awareness programmes need to be initiated.
- They should take up the responsibility to create awareness to Clinical Features and Complication of coronary artery diseases among adults.

Nursing Research
- The essence of research is to build up the body of knowledge in nursing as an evolving profession.
- More research studies stimulate recommended, recognize and support the physical and mental and its transient into community practice.

Recommendations for Further Research: On the basis of finding of the study the following recommendations are be suggested in the future research:
- A similar study can be conducted at different setting in different population.
- A comparative study can be conducted between staff nurses and nursing students.
- A similar study can be also done in higher socio economic groups.

Conclusion
The study concluded that, majority of the people having in adequate knowledge about the Clinical Features and Complication of coronary artery diseases. As a research investigator need to conduct various educational programmes to create awareness among public. It helps to adults to take preventive measures to reduce risk of coronary artery diseases.

References
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