JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING PREVENTIVE MEASURES OF CARDIOVASCULAR DISEASE AMONG ADULT POPULATION IN VIRACHILAI

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Abstract : Cardiovascular diseases (CVDs) are a major public health concern and many of their risk factors can be reduced through healthy lifestyle practices, early identification and appropriate management. This descriptive study assessed knowledge regarding preventive measures of cardiovascular disease among adults in Virachilai, Pudukkottai district. A quantitative, non-experimental descriptive design was used. The project reports a sample of 30 adults selected by non-probability convenience sampling, comprising 15 males and 15 females. Data were collected using a structured questionnaire containing 40 multiple-choice knowledge items. Descriptive statistics and chi-square analysis were reported as the planned methods. The project discussion reports that 36% of participants had adequate knowledge, 30% had moderately adequate knowledge and 34% had inadequate knowledge. However, the source report contains inconsistencies in scoring categories, percentages and some demographic and association tables. These results should therefore be checked against the original master data and scoring key before formal publication. The study highlights the importance of community-based health education on cardiovascular risk factors and preventive practices.

Index Terms - Cardiovascular disease, knowledge, preventive measures, adults, descriptive study, community health nursing.

I. INTRODUCTION

Cardiovascular diseases are a group of disorders affecting the heart and blood vessels, including coronary heart disease, cerebrovascular disease and peripheral arterial disease. They remain a leading cause of death worldwide. Many cardiovascular events are associated with modifiable behavioural and metabolic risk factors, including tobacco use, unhealthy diet, physical inactivity, harmful use of alcohol, raised blood pressure, raised blood glucose, abnormal blood lipids and overweight or obesity.

Preventive measures include consuming a balanced diet, reducing salt and unhealthy fat intake, eating fruits and vegetables, engaging in regular physical activity, maintaining a healthy body weight, avoiding tobacco, limiting alcohol use and controlling hypertension and diabetes. Community awareness is essential because adults make daily decisions that influence cardiovascular health. Nurses contribute through health assessment, screening, counselling, health education and follow-up. The present study was undertaken to assess knowledge regarding preventive measures of cardiovascular disease among adults in Virachilai.

II. AIM AND OBJECTIVES

Aim: To assess the knowledge regarding preventive measures of cardiovascular disease among adults in Virachilai.

Objectives: (1) To assess the level of knowledge regarding preventive measures of cardiovascular disease among adults. (2) To determine the association between the level of knowledge and selected demographic variables.

Hypothesis: There will be a significant association between the level of knowledge regarding preventive measures of cardiovascular disease and selected demographic variables among adults in Virachilai.

III. RESEARCH METHODOLOGY

Research approach and design: A quantitative approach and non-experimental descriptive research design were reported in the source project. The study was conducted in Virachilai village, Pudukkottai district, Tamil Nadu, India.

Population and sample: The target population consisted of adults residing in Virachilai. The project reports a sample of 30 adults, including 15 males and 15 females. Participants were selected using non-probability convenience sampling.

Eligibility criteria: The source project describes eligible participants as adults willing to participate and having cardiovascular disease/coronary artery disease. Those unwilling to participate and those without coronary artery disease were excluded. The intended study population should be confirmed by the investigators because the title refers broadly to the adult population.

Description of the tool: A structured questionnaire developed by the investigators with expert guidance and literature review was used. Section A collected socio-demographic information. Section B consisted of 40 multiple-choice questions, each with four options and one correct answer, covering meaning, causes, risk factors, clinical features, complications and management/prevention of cardiovascular disease. Each correct answer was assigned one mark and each incorrect answer zero, giving a maximum score of 40.

Data collection and analysis: The source project reports obtaining permission from the village authority and informed consent from participants. The purpose of the study was explained and confidentiality was maintained. Frequency and percentage were used for descriptive analysis, and chi-square was identified for association testing. Complete inferential statistics were not consistently available in the report.

IV. RESULTS AND DISCUSSION

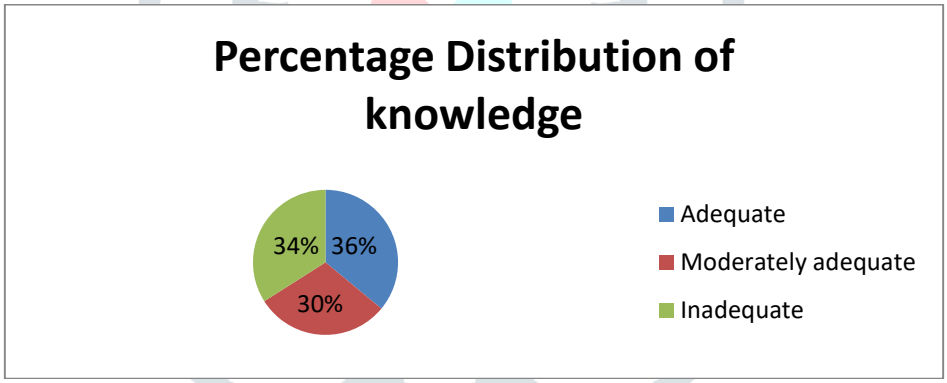
A total of 30 adults were included according to the methodology and summary of the source project. The demographic information reported equal representation of males and females (15 each), and all participants were from a rural setting. The source report describes television as a leading source of information. Some demographic table entries and category labels are incomplete or inconsistent.

Table 1. Selected demographic characteristics reported in the project

Characteristic	Reported finding
Gender	Male: 15 (50%); Female: 15 (50%)
Residence	Rural: 30 (100%)
Education	Literate: 15 (50%); Illiterate: 15 (50%)
Source of information	Television was described as the leading source; counts require verification

Table 2. Reported level of knowledge regarding preventive measures of CVD

Knowledge category	Percentage
Adequate	36%
Moderately adequate	30%
Inadequate	34%
Total	100%*



The discussion chapter of the source project states that 36% of adults had adequate knowledge, 30% had moderately adequate knowledge and 34% had inadequate knowledge. Elsewhere, the summary describes inadequate knowledge as the major finding. Because these statements are not fully consistent, the distribution is presented as reported and should not be interpreted as a definitive corrected result.

The questionnaire covered non-modifiable risk factors such as age, sex and hereditary factors; modifiable risk factors such as obesity, hypertension, diabetes and stress; dietary habits; lifestyle practices; preventability of heart disease; signs and symptoms; and preventive measures. The source project reports an association between family history of cardiovascular disease and knowledge level. However, the complete chi-square values, degrees of freedom and p-values should be verified from the original data before drawing a statistical conclusion.

The project discussion cites earlier studies by Pandey and Khadka and by Choudhary, Sharma and Sodhi. The overall findings reinforce the role of community nursing in identifying knowledge gaps and promoting healthy lifestyle practices.

V. NURSING IMPLICATIONS

Nursing practice: Nurses can assess cardiovascular risk factors, provide individual and group counselling, encourage regular blood-pressure and blood-glucose checks, promote tobacco cessation and support adherence to prescribed treatment.

Nursing education: Community education sessions, posters, demonstrations and local-language teaching materials can improve understanding of healthy diet, physical activity, weight management and early warning symptoms.

Nursing administration: Nurse administrators can organize community screening and health-education programmes, coordinate referral and follow-up services, and ensure the availability of educational materials in hospitals and community settings.

Nursing research: Further studies with larger samples, clearly defined eligibility criteria, validated scoring categories and complete statistical reporting are recommended.

VI. LIMITATIONS

The study was limited to 30 adults from one village and used convenience sampling, which limits generalizability. The source project contains inconsistencies in sample eligibility, age categories, scoring cut-offs, percentages and association statistics. A numerical reliability coefficient and complete inferential results were not available in the report.

VII. CONCLUSION

The study assessed knowledge regarding preventive measures of cardiovascular disease among adults in Virachilai. The reported findings indicate that knowledge gaps may remain in important areas of cardiovascular prevention. Community-based health education, screening, counselling and follow-up by nurses can support awareness of modifiable risk factors and encourage preventive health practices. The numerical findings and statistical associations should be confirmed from the original master data before submission or publication.

ACKNOWLEDGMENT

The investigators acknowledge the support and cooperation of the participants, the village authorities and the faculty members of Mount Zion College of Nursing, Pudukkottai, for their assistance in carrying out the study.

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