

“A DESCRIPTIVE STUDY TO EVALUATE THE AWARENESS OF RISK FACTORS AND PREVENTION METHODS OF CORONARY ARTERY DISEASE AMONG PATIENTS VISITING THE MEDICINE OUTPATIENT DEPARTMENT AT RAMA HOSPITAL AND RESEARCH CENTER IN MANDHANA, KANPUR.”

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Abstract

Coronary Artery Disease (CAD) ranks among the top causes of illness and death globally. It happens because of the narrowing or obstruction of coronary arteries resulting from atherosclerosis. Key risk factors encompass high blood pressure, tobacco use, diabetes, excess weight, lack of physical activity, and poor eating habits. The main emphasis in preventing CAD is on changing one's lifestyle and identifying risk factors early. The main aim of the study was to evaluate the awareness of risk factors and prevention methods of coronary artery disease among patients visiting the medicine outpatient clinic. A research design that is descriptive was employed. Samples were chosen through a non-probability convenience sampling method. The overall number of participants was 100 patients. Information was gathered through a self-designed questionnaire. The results showed a notable correlation between knowledge scores and specific demographic factors including age, gender, educational level, and lifestyle practices at the 0.05 significance level. Consequently, hypothesis H1 is affirmed.

Keywords: Coronary Artery Disease, eating habits.

1. Introduction:

Coronary Artery Disease (CAD) is a long-lasting and advancing cardiovascular disorder marked by plaque buildup in the coronary arteries, which results in decreased blood supply to the heart muscles.¹ It poses a significant public health issue worldwide and greatly impacts mortality rates. Typical signs of CAD consist of chest discomfort (angina), difficulty breathing, tiredness, and in more serious instances, heart attack. The condition progresses slowly and is closely linked to both modifiable and non-modifiable risk factors.²

Changeable risk factors encompass smoking, high blood pressure, elevated cholesterol, obesity, inactivity, and poor nutrition.³ Non-changeable factors consist of age, sex, and genetic susceptibility. Prevention measures aim to manage these risk factors via lifestyle changes, routine health examinations,

adherence to medication, and health awareness.⁴

2. Need for the study

Coronary artery disease accounts for a significant number of deaths worldwide. Global health reports indicate that cardiovascular diseases result in approximately 17.9 million fatalities annually. In India, the prevalence of CAD has risen due to swift urbanization, a sedentary lifestyle, and alterations in diet. Insufficient awareness of risk factors and preventive strategies exacerbates the disease burden.⁵

3. Statement of the problem

“A descriptive study to evaluate the awareness of risk factors and prevention

methods of coronary artery disease among patients visiting the medicine outpatient department at Rama Hospital and Research Center in Mandhana, Kanpur.”

Objectives of the Study:

1. To evaluate patients' understanding of risk factors and prevention for coronary artery disease.
2. To determine the relationship between knowledge scores and chosen demographic variables.

Hypothesis:

H0: There is no meaningful relationship between knowledge score and chosen demographic variables.

H1: A notable correlation exists between the knowledge score and specific demographic variables

4. Materials and methods:

• Variable of Interest:

Understanding the risk factors and preventive measures for coronary artery disease.

• Demographic Factors:

Age, Gender, Education, Job, Lifestyle choices.

• Demographics:

Individuals visiting the medical outpatient department in Kanpur.

• Intended Audience:

Individuals visiting the medicine outpatient department at Rama Hospital and Research Center in Mandhana, Kanpur.

• Reachable Population:

- ✓ Patients present during the time of data gathering.
Patients visiting the medicine outpatient department.

• Number of Participants:

One hundred patients.

• Method of Sampling:

Technique of non-probability convenience sampling.

• Criteria for Sampling: Eligibility Requirements:

- ✓ Individuals visiting the medicine outpatient department
- ✓ Patients ready to take part
- ✓ Patients accessible at the time of data gathering

• Criteria for Exclusion:

- ✓ Individuals who are extremely unwell
- ✓ Patients unwilling to take part

5. Development & description of tools

The tool consists of two sections:

SECTION A:

Demographic variables such as Age, Gender, Education, Occupation, Lifestyle habits.

SECTION B:

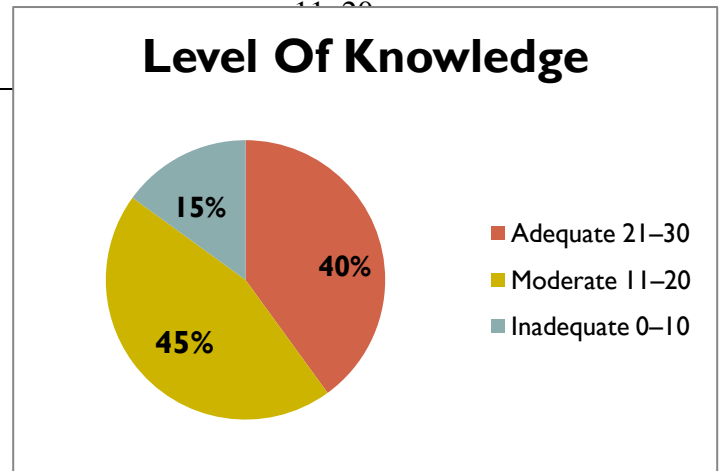
Self-structured questionnaire consisting of 30 questions related to risk factors and prevention of CAD.

Each correct answer carries 1 mark.
Maximum score = 30

Table No. 1: Classification of Knowledge Level

Sr. No.	Level of Knowledge
1	Inadequate
2	Moderate
3	Adequate

2	Moderate	11–20	45	45%	15.2	4.6
3	Inadequate	0–10	15	15%		
	TOTAL		100	100%		
	L		Score			



6. Data collection procedure

Formal permission was obtained from the hospital authority. Informed consent was taken from participants. Data was collected using a structured questionnaire. The purpose of the study was explained to the participants, and confidentiality was maintained.

7. Result and findings

SECTION A (Demographic Data):

- Majority (60%) of patients was in the age group of 40–60 years.
- Majority (65%) was male.
- Majority (70%) had secondary education.
- Majority (55%) had sedentary lifestyle.
- Majority (62%) had history of hypertension.

SECTION B (Knowledge Assessment):

Table No. 2: Distribution of Knowledge Scores

Sr. No.	Level of Knowledge	Score Range	Frequency	Percentage	Mean	S. D.
1	Adequate	21–30	40	40%		

Interpretation:

Majority (45%) had moderate knowledge, 40% had adequate knowledge, and 15% had inadequate knowledge.

SECTION-C

Association between Demographic Variables with their Knowledge Score

Sr. No.	Demographic Variables	Adequate	Moderate	Inadequate	Chi-Square	Inference
1	Age (in years)					
	a. 30–40 years	5	10	5		

	b. 41–50 years	10	15	5	12.36 df=6	P>0.05 Significant
	c. 51–60 years	15	12	3		
	d. Above 60 years	10	8	2		
2	Gender					
	a. Male	25	30	10		
	b. Female	15	15	5	10.24 df=2	P>0.05 Significant
3	Education					
	a. Primary	5	10	5		
	b. Secondary	15	20	5	14.52 df=6	P>0.05 Significant
	c. Graduate	12	10	3		
	d.	8	5	2		

	Postgraduate					
4	Lifestyle Habits					
	a. Sedentary	10	25	10		
	b. Moderate activity	20	15	3	11.18 df=4	P>0.05 Significant
	c. Active	10	5	2		

Interpretation:

The table presented indicates a substantial relationship between knowledge scores and chosen demographic factors like Age, Gender, Education, and Lifestyle habits.

Thus, hypothesis H1 is accepted.

8. Recommendations:

Nursing Implications:

- Nurses can educate patients regarding CAD prevention.
- Awareness programs can be conducted in OPDs.

Nursing Education:

- This topic can be included in teaching curriculum.

Nursing Research:

- Additional research can be performed using bigger samples.
- A comparable study may be performed with a bigger sample size.

- Comparative research can take place in both rural and urban settings.

9. Conclusion

The research finds a notable correlation between the level of knowledge and chosen demographic variables. Most patients possessed a fair understanding of the risk factors and prevention strategies for coronary artery disease. Therefore, hypothesis H1 is acknowledged.

10. References

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