

**Assess the knowledge and attitude regarding diet management in cardiac disease among care givers of patient admitted with cardiac disease with a view to develop information booklet.**

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### **ABSTRACT**

**Background of the study:** Diet is only the factor which is playing important role in occurrence of cardiac disease and after treatment also if diet management is not Proper reoccurrence of cardiac disease chances will be there.

**Objectives of the study:** The objectives of the study were to assess the level of knowledge and attitude regarding diet management in cardiac disease among care givers of patient, to know the association of the demographic variables on the knowledge and attitude aspects and to develop an information booklet on diet management for cardiac disease.

**Material and method:** Non experimental approach was used with one Descriptive survey design. The investigator used convenient sampling technique for selecting 150 samples. A structured knowledge questionnaire and Likert attitude scale were prepared to assess the knowledge and attitude of the samples. The reliability of the structured knowledge questionnaire was determined by 'test retest method' and attitude test was determined by Likert attitude scale.

**Result:** The knowledge scores of the samples on cardiac diet management Majority of sample having average knowledge 130 (86.66%) and Majority of sample 51 (51%) having negative attitude towards cardiac diet management that may be leads to due to different demographic variables. The association between the knowledge score and demographic variables was tested using the chi-square test. As for the demographic variable Educational status calculated value is 13.197 and tabulated value of chi square ( $\chi^2$ ) is 12.59 degree of freedom is 6. Calculated value is bigger than tabulated value hence association between knowledge score & demographic variable is significant. Thus it was concluded that there was significant association found between knowledge score and demographic variables.

**Conclusion:** There was no any significant association found between with attitude score and demographic variables. Thus it was concluded that there was significant association between knowledge score and the selected demographic variables. No any association found between Attitude score and the selected demographic variables.

**Key Words:** *Knowledge, Attitude, Cardiac disease, diet management.*

## **INTRODUCTION**

Cardiovascular disease or disorders define as any conditions that involve narrowed or blocked blood vessels or obstruction in the blood vessels due to which heart attack, chest pain or stroke can occur. There are number of research on cardiovascular diseases which says that stress, smoking, high blood pressure, and high cholesterol due to unhealthy dietary practices can be the risk factors for heart diseases. Maximum of cardiovascular diseases develops due to poor diet intake or unhealthy dietary pattern. So, it is very important to focus on diet management among patients with cardiac disease or disorders.<sup>1</sup> According to the research of WHO, India will have the largest Coronary artery disease burden in the world. One fifth of the deaths in India are from Coronary heart disease and many of these Indians will be dying young. Heart disease in India most commonly occurs in young age due unhealthy dietary pattern, stress and sedentary lifestyle.

Coronary heart disease is a main cause of mortality and morbidity all over the world.<sup>2</sup> As per the WHO report Cardiovascular diseases take the lives of approximately 18 million people every year, 30% of all global deaths. There are also some other causative factors which triggers the diseases like – excessive stress, tobacco use, unhealthy diet, physical inactivity and the excessive use of use of alcohol. All these causative factors results in raised blood pressure, elevated blood glucose and overweight and obesity.<sup>3</sup> There is an highest increase of cardiovascular diseases in India in last two decades. Communicable diseases are also increasing rapidly along with communicable diseases, thus leading to a dual burden.<sup>4</sup> According to a study proper nutrition and cardiac rehabilitation can able to cure cardiovascular disease in most of the cases. Adequate nutrition and diet management along with other medical and surgical management plays an important role in managing risk for cardiovascular disease.<sup>5</sup>

#### **OBJECTIVES:**

1. To assess the level of knowledge regarding diet management in cardiac disease among care givers of patient.
2. To assess the level of attitude regarding diet management in cardiac disease among care givers of patient.
3. To find out association between level of knowledge and selected demographic variable.
4. To find out association between Attitude and selected demographic variable.
5. To develop an information booklet on diet management for cardiac disease.

#### **ASSUMPTION:**

1. The knowledge on diet management will be inadequate among care giver of patient.
2. The information booklet may be useful source to improve knowledge related diet management in cardiac disease.

#### **METHOD**

Non experimental approach was used with one Descriptive survey design. The investigator used convenient sampling technique for selecting 150 samples. A structured knowledge questionnaire and Likert attitude scale were prepared to assess the knowledge and attitude of the samples. The reliability of the structured knowledge questionnaire was determined by ‘test retest method’ and attitude test was determined by Likert attitude scale. The data were analysed and interpreted in terms of objectives and assumption of the study. Descriptive and inferential statistics methods were used for data analysis. Data were organized and presented in following manner which

includes description of the all aspects. The data collection was done within a given period of 2 weeks, dated 5<sup>th</sup> to 18<sup>th</sup> November 2017. For this study, the data obtain were analyzed in respect to the objectives of the study by using descriptive and inferential statistics; Master data sheets were prepared; Mean, mean % and SD of the knowledge score were analyzed.

**RESULT**

**SECTION: 1 Description of samples according to their demographic characteristics**

**N=150**

<b>SR NO</b>	<b>VARIABLE</b>	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
<b>1</b>	<b>Age:</b> A. 18- 27 year B. 28- 37 year C. 38 - 47year D. > 48 years	34 35 37 44	22.66% 23.33% 24.66% 29.33%
<b>2</b>	<b>Gender:</b> A. Male B. Female	101 49	67.33% 32.66%
<b>3</b>	<b>Educational qualification:</b> A. Illiterate B. Primary C. Secondary D. Graduate E. Post graduate & more	00 35 48 56 11	0 % 23.33% 32% 37.33% 7.33%
<b>4</b>	<b>Type of occupations:</b> A. Job B. Business C. Laborer D. Other	37 25 31 57	24.66% 16.66% 20.66% 38%
<b>5</b>	<b>Type of family:</b> A. Nuclear B. Joint	30 120	20% 80%

<b>6</b>	<b>Monthly Income:</b> A. < 5000 Rs B. 5000- 10,000 Rs C. 10,000-15000 Rs D. >15000 Rs	30 40 34 46	20% 26.66% 22.66% 30.66%
<b>7</b>	<b>Type of diet</b> A. Vegetarian B. Non-vegetarian C. Vegetarian + no veg D. Vegetarian + Eggetarian	132 00 12 6	88% 00% 8% 4%
<b>8</b>	<b>Source of Information:</b> A. Mass media B. Neighbor / relatives C. News paper D. Educational Programmed	52 55 36 7	34.66% 36.66% 24% 4.66%

**TABLE 1: Frequency and percentages distribution of samples according to their demographic characteristic.**

In this study, out of 150 samples majority of the sample 44(29.33%) were belongs from age group more than 48 year. Majority of 101(67.33%) sample were belongs to male. Majority of sample 48 (32%) had their secondary education, Majority of sample 37 (24.66%) belongs to job, majority of sample 120(80%) were belongs to joint family, majority of sample 40 (26.66%) were having 5000- 10,000 Rs income per month, majority of sample 132 (88%) were vegetarian, majority of sample 55 (36.66%) having information regarding cardiac diet through their Neighbors / relative.

#### **4.1 SECTION: 2 ANALYSIS AND INTERPRETATION OF DATA COLLECTED ON STRUCTURED KNOWLEDGE QUESTIONNAIRE OF THE SAMPLE**

**N=150**

<b>SR NO</b>	<b>KNOWLEDGE</b>	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
1	POOR	06	4%
2	AVERAGE	130	86.66%
3	EXCELLENT	14	9.33%

	TOTAL	150	100%
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**TABLE 2 :** Table 2 shows that knowledge scores of the samples on cardiac diet management was: poor knowledge 6(4%), average knowledge 130 (86.66%) and Excellent 14(9.33%). Most of sample comes under Average category total no of frequency is 130 and 86.66% percentage.

**SECTION: 3 ANALYSIS AND INTERPRETATION OF DATA COLLECTED ON LEVEL OF ATTITUDE ABOUT CARDIAC DIET AMONG SAMPLE.**

**N=150**

Level of Attitude	Frequency	Percentage
Positive	49	49%
Negative	51	51%

**TABLE 3 :** The data depicts that 49 % sample having positive attitude 51 % sample having negative attitude towards cardiac diet management.

**DISCUSSION**

Sonia S. Anand (2016) conducted study on Food Consumption and its impact on Cardiovascular Disease: Importance of Solutions focused on the globalized food system based on a 3-day consensus, created an in-depth review of current knowledge on the role of diet in CVD, the changing global food system and global dietary patterns, and potential policy solutions.<sup>6</sup> Krithiga Shridhar (2014) conducted the study on The Association between a Vegetarian Diet and Cardiovascular Disease (CVD) Risk Factors in India the The goal was to find out the association between diet and IHD risk among Indians.<sup>7</sup> V J Burley (2013) conducted study on dietary fiber intake is associated with a lower risk of both cardiovascular disease and coronary heart disease..<sup>8</sup> Lecerf JM (2009) conducted study on Fatty acids and cardiovascular disease. He classified fatty acids into "good" or "bad" groups according to their degree of unsaturation or whether they are "animal fat" or "vegetable fat".<sup>9</sup> Br J Nutr (2006) conducted study on Fatty acid composition of nuts--implications for cardiovascular health. he established that due to their high content of saturated fatty acids (SFA), the intake of meat and meat products is strongly associated with

elevated blood cholesterol concentrations and an increased risk of hypertension, diabetes and cardiovascular diseases.<sup>10</sup>

### **CONCLUSION**

In present study knowledge of the samples were maximum Average score. Samples were negative attitude towards diet management. There was significant association found between knowledge and demographic data and no any significant association found between with attitude score and demographic variables.

**Conflict Interest:** No relevant conflict.

**Source of funding:** For this research study project researchers' own budget was used.

**Ethical Clearance:** It was obtained from concerned formal administrative authorities and informed consent was taken from the samples before data collection process.

### **REFERENCE**

1. Rehabilitation and preventive cardiology in elderly”, cardiology clinics, Volume : 17,233-242.
2. Black M. Joyce. Jane Hokanson Hawks et.al.,(2004). “Medical Surgical Nursing Clinical Management for Positive Outcomes”, (7thed), New Delhi, Elsevier India private ltd, Volume-I,68.
3. C.Gopalan – “Nutritive value of Indian food”, first edition (2004) page No.24.
4. Dubach.P., et.al., (1998).”Optimal timing of phase II rehabilitation after myocardial infarction”, European heart Journal,35-3
5. Fawcet and Jacqueline., (1999), “The Relationship of Theory and Research”, (3rd ed), Philadelphia, F.A. Davis company, 203 – 208.
6. Sonia S. Anand (2016)., “Effects of blood pressure of reduced dietary sodium and the dietary approaches to stop hypertension (DASH) diet 2001.
7. Krithiga Shridhar (2014), “Differences in risk factors and mortality, in young and old acute

- myocardial infarction in Goa” Journal of clinical and diagnostic research, Volume : 2, 715-719.
8. V J Burley (2013) , “Deteriorating dietary habits among adults with hypertension, DASH dietary accordance, NHANES 1988-1994 and 1999-2004”. Aren Intern Med 2008, Feb 11:1683 : 308-14.
  9. Lecerf JM (2009), “cardiac rehabilitation for heart failure patients”, International journal of cardiovascular medicine, Volume : 76, no.5.
  10. Br J Nutr (2006) “Implication of a health lifestyle and medication analysis for improving hypertension control”. Arch Intern Med. 2000 Feb28;160(4) : 481-90.