KNOWLEDGE AMONG PATIENT ABOUT THE MODIFIABLE RISK FACTORS OF HEART DISEASE

Saima Nabi [1]Gazala Nisar[2]

[1]Institute of Home Science (Specialization Dietetics and Clinical Nutrition)University of Kashmir, Hazratbal, Srinagar. email Id: saima.parray786@gmail.com)

[2] Assistant Professor (Institute of Home Science (Specialization food Science and Nutrition)University of Kashmir, Hazratbal, Srinagar. email Id: nisargazala@gmail.com)

Corresponding Author

Gazala Nisar, Assistant Professor, Institute of Home Science, University of Kashmir,Hazratbal,J&K,190006,India.

e-mail Id : nisargazala@gmail.com

ABSTRACT

Knowledge is an important pre-requisite for implementing both primary as well as secondary preventive strategies for heart disease. The present study was conducted with an objective to find out the type of heart disease present among the patients, to know the knowledge of patients regarding relationship between obesity, smoking and heart disease. To know the patients beliefs about exercise and heart disease. A comprehensive questionnaire-cum-interview schedule was designed to collect the desired information. A total no. of 50 patients of both the sexes suffering from Heart Disease were selected. The sample was collected from Outpatient Department (OPD) of cardiology of SMHS and SKIMS hospital of District Srinagar Kashmir. The two scales were used in questionnaire i.e. **ordinal** and **likert scale.** Sample was selected by simple random purposive sampling technique. The results of the study revealed that majority of respondents were having angina pectoris. Majority of male as well as female respondents i.e. 65.7% and 60% respectively were having knowledge about relationship between smoking and heart disease. They were of the opinion that smoking increases the risk of heart disease. Majority of male as well as female respondents i.e. 80% respectively were having knowledge about relationship between obesity and heart disease. They were of the opinion that obesity increases the risk of heart disease.Majority of male as well as female respondents   i.e. 57.1% and 53.3% respectively agreed to the statement that regular exercise can lower their risk of developing heart disease.

KEY WORDS: - Knowledge, Heart Disease, Modifiable, Risk Factors, Beliefs.

INTRODUCTION:

Heart disease or cardiopathy is an umbrella term for a variety of diseases affecting the heart. The heart is the center of the cardiovascular system. Through the body's blood vessels, the heart pumps blood to all of

15368

the body's cells. The blood carries oxygen, which the cells need. Heart Disease is the leading cause of death in the United States, responsible for more than 40% of annual deaths. An average1 death due to cardiovascular disease (CVD) occurs every second in the United states (Arialdi *et al.,* 2007 & American Heart Association 2002). England, Canada and Wales, accounting for 25.4% of the total deaths in the United States (National vital statistics report 2010). New research published in the lancet finds that India will bear 60% of world's heart disease burden in the next two years. In addition, researchers have determined that compared to people in other developed countries, the average age of patients with heart disease is lower among Indians are more likely to have types of heart disease that lead to worse out comes (The lancet 2008).

Cardiovascular disease is a group of problems that occur when the heart and blood vessels are not working the way they should. Some of the problems that go along with cardiovascular disease includes arteriosclerosis, atherosclerosis, angina, heart attack, myocardial infarction, stoke, Ischemic heart disease, hypertension, congestive heart failure. Arteriosclerosis also called hardening of the arteries, arteriosclerosis means the arteries become thickened and are no longer as flexible. Atherosclerosis a buildup of cholesterol and fat that makes the arteries narrower so less blood can flow through. Those buildups are called plaque**.** People with angina feel a pain in the chest that means the heart is not getting enough blood. When a blood clot or other blockage cuts blood flow to a part of the heart it leads to heart attack. When part of the brain does not get enough blood due to a clot or a burst blood vessel it leads to stroke. (Steven Dowshen 2009). Myocardial infarction, (MI) in the coronary arteries resulting in necrosis, tissue damage, and sometimes sudden death. Ischemic, insufficient blood flow in a tissue resulting from functional constriction or actual obstruction of a blood transport. Hypertension, persistently high arterial blood pressure, defined as systolic blood pressure above 140 mm Hg or diastolic blood pressure above 90 mm Hg (Joint National Committee 2003). Congestive heart failure (CHF) is a condition that can result from any structural or functional cardiac disorder that impairs the ability of the heart to fill with or pump a sufficient amount of blood throughout the body. Therefore leading to the heat and body's failure.
(WHO 2009).

There is no single cause for heart disease, but there are 'risk factors' that increase the chance of developing it. The risk factors of heart disease can be categorized into 'modifiable' risk factors and 'non modifiable' risk factors. Modifiable risk factors include smoking, high total blood cholesterol, high blood pressure, diabetes, being physically inactive, being overweight, depression, social isolation and lack of quality social support. Non modifiable include increasing age, being male and having a family history of heart disease. (United States Preventive Services Task Force 2009).

Objectives:

1. To find out the type of heart disease present among the patients.

2. To know the knowledge of patients regarding relationship between obesity, smoking and heart disease.

3. To know the patients beliefs about exercise and heart disease.

RESEARCH METHODOLOGY

The methodology undertaken in the present study is as follows:

MATERIAL SECTION

The material of the study were 50 patients of both the sexes suffering from Heart Disease.

A) **Selection of sample:-** The sample was collected from Outpatient Department (OPD) of cardiology of SMHS and SKIMS Hospital.

B) **Sample size:-** The sample for the present study consisted of 50 patients of heart disease of both sexes and of different age groups.

TOOLS USED

During the study a questionnaire-cum-interview schedule were used to collect the information from the sample patients. The questionnaire was divided into various sections to collect the required information. The two scales were used in questionnaire i.e. **ordinal** and **likert scale.**

Ordinal scale: A ranking scale in which numbers are assigned to objects to indicate the relative extent to which some characteristic is possessed. Thus it is possible to determine whether an object has more or less of a characteristic than some other object

Likert scale: Named after its developer Rensis likert. It is a widely used rating scale that requires the respondents to indicate a degree of agreement or disagreement with each of a series of statements about stimulus objects. A measurement with five response categories ranging from "Strong disagree to strongly agree" which requires respondents indicate a degree of agreement or disagreement with each of a series statements related to the stimulus objects.

DATA SOURCE

In the present study, both primary as well as secondary source of data were used to obtain the desired information.

Primary Data

Primary data was collected by using a structured questionnaire-cum- interview schedule. A total no. of 50 respondents suffering from heart disease were selected from OPD of SKIMS (20) and SMHS (30) hospitals. Sample was selected by simple random purposive sampling technique.

Beliefs about factors that potentially influence the risk of heart disease were measured on **5-point Likert-type scale**. Where a score of 5 represented "strongly agree" and 1 represented "strongly disagree."

Secondary Data

Secondary data included information obtained from different books, journals, unpublished dissertations from Sheri Kashmir Institute of Medical Science (SKIMS) and Sheri Maharaja Hari Singh (SMHS) and from Institute of Home Science & latest information from internet.

DATA ANALYSIS

The data obtained from the survey was carefully scrutinized and was condensed in the master chart. The data was then tabulated, represented through figures and was statistically analyzed.

RESULTS

The results obtained from the present investigation are presented below:

Table 1:Distribution of respondents as per sex and type of heart disease.

Types of heart disease	Sex				Overall	
	Males		Females			
	N	%	N	%	N	%
Angina	19	54.3	9	60	28	56
Myocardial Infarction	4	11.4	4	26.7	8	16
Acute coronary heart disease	8	22.8	-	-	8	16
Rhematiod	1	2.9	1	6.7	2	4
Atherosclerosis	1	2.9	1	6.7	2	4
Thrombosis	2	5.7	-	-	2	4

Table 1 shows the distribution of respondents as per type of heart disease. The table reveals that majority of male as well as female respondents were having angina pectoris i.e. 54.3% and 60% respectively.

Table 2: Knowledge among Patients regarding relationship between Smoking and Heart Disease.

Statement	Response	Sex				Overall	
		Males		Females			
		N	%	N	%	N	%
Is there any relationship between smoking and heart disease	1.Yes	23	65.7	9	60	32	64
	2.No	-	-	-	-	-	-
	3.Don't know	12	34.3	6	40	18	36
How does smoking affect the heart disease	1.Increases Risk of Heart Disease	23	65.7	9	60	32	64
	2.Decreases Risk of Heart Disease	-	-	-	-	-	-
	3.No effect	-	-	-	-	-	-
	4.Don't know	-	-	-	-	-	-

Table 2 reveals that majority of male as well as female respondents i.e. 65.7% and 60% respectively were having knowledge about relationship between smoking and heart disease. They were of the opinion that smoking increases the risk of heart disease. Only 34.3% and 40% 0f male as well as female respondents respectively were of the opinion that they do not know anything about the relationship between smoking and heart disease.

Table 3: Knowledge of Patients regarding relationship between obesity and heart disease

Statement	Response	Sex				Overall	
		Males		Females			
		N	%	N	%	N	%
Is there any relationship	1.Yes	28	80	12	80	40	80
	2.No	-	-	-	-	-	-

between obesity and heart disease	3.Don't know	7	20	3	20	10	20
How does obesity affect heart disease	1.Increases Risk of Heart Disease	28	80	12	80	40	80
	2.Decreases Risk of Heart Disease	-	-	-	-	-	-
	3.No effect	-	-	-	-	-	-
	4.Don't know	-	-	-	-	-	-

Table 3 reveals that majority of male as well as female respondents i.e. 80% respectively were having knowledge about relationship between obesity and heart disease. They were of the opinion that obesity increases the risk of heart disease. Only 20% each male as well as female respondents were not knowing anything about the relationship between obesity and heart disease.

Table 4: Patients Beliefs about exercise and heart disease.

(n=50).

Belief statement	Sex									
	Males					Females				
	strongly agree	agree	neither agree nor disagree	strongly disagree	disagree	strongly agree	agree	neither agree nor disagree	strongly disagree	disagree
I feel that regular exercise can lower my risk of developing heart disease	14.3	57.1	-	-	28.6	-	53.3	-	-	46.7
I feel that having thin & lean body can lower my risk of developing heart disease	2.9	80	-	-	17.1	6.7	66.6	6.7	-	20

Table 4 reveals that majority of male as well as female respondents i.e. 57.1% and 53.3% respectively agreed to the statement that regular exercise can lower their risk of developing heart disease.

CONCLUSION:

It was concluded from the present study that overall Majority of male as well as female respondents were having angina pectoris i.e. 54.3% and 60% respectively. Majority of male as well as female respondents i.e. 65.7% and 60% respectively were having knowledge about relationship between smoking and heart disease. They were of the opinion that smoking increases the risk of heart disease. Only 34.3% and 40% 0f male as well as female respondents respectively were of the opinion that they do not know anything about the relationship between smoking and heart disease. Majority of male as

15373

well as female respondents i.e. 80% respectively were having knowledge about relationship between obesity and heart disease. They were of the opinion that obesity increases the risk of heart disease. Only 20% each male as well as female respondents were not knowing anything about the relationship between obesity and heart disease. Majority of male as well as female respondents   i.e. 57.1% and 53.3% respectively agreed to the statement that regular exercise can lower their risk of developing heart disease.

RECOMMENDATIONS

In principle, all people can take these 5 simple ways towards Heart Disease Prevention.

- High blood cholesterol is a major risk factor for heart disease. Preventing and treating high blood cholesterol includes eating a diet low in saturated fat and cholesterol and high in fiber, keeping a healthy weight, and getting regular exercise.

- Lifestyle actions such as healthy diet, regular physical activity, not smoking, and healthy weight will help you to keep normal blood pressure levels and all adults should have their blood pressure checked on a regular basis. A blood pressure can usually be controlled with lifestyle changes and medicines when needed.

- Smoking increases the   risk of high blood pressure, heart disease, and stroke. Never smoking is one of the best things a person can do to lower their risk. And, quitting smoking will also help lower a person's risk of heart disease. A person's risk of heart attack decreases soon after quitting.

- Regular Physical activity. Adults should engage in moderate level physical activities for at least 30 minutes on most days of the week.

- Along with healthy weight   and regular physical activity, an overall healthy diet can help to lower blood pressure and cholesterol levels and prevent obesity, diabetes, heart disease, and stroke. This includes eating lots of fresh fruits and vegetables, lowering or cutting out added salt or sodium, and eating less saturated fat and cholesterol to lower these risks.

REFERENCES

➢ Arialdi, M., Miniño, M.P.H., Melonie, P., Heron, Sherry, L., Murphy, B.S., Kenneth, D., & Kochanek, M.A. (2007). *Division of Vital Statistics*; *"Deaths: Final data for 2004"* . National Vital Statistics Reports United States: Center for   Disease control, 55 (19), 7.

➢ Ford, E.S., and   Jones, D.H. (1985). *Cardiovascular health knowledge in the United States:* findings from the National Health Interview Survey,   *Prev Med* 1991, 20 (6), 725-736.

➢ Joint National Committee (2003). *The Seventh Report on Prevention, Detection , Evaluation, and Treatment of High Blood Pressure*, 42-1206.

➢ Jafary, F.H., Aslam, F., Mahmud, H., Waheed, A., Shakir, M., Afzal, A., Qayyum, M.A., Akram, J., Khan, I.S., & Haque, I.U. *Cardiovascular health knowledge and behavior in patient attendants at four tertiary care hospitals in Pakistan – a cause for concern.* *BMC Public Health*, 5-124.

➢ *National Vital Statistics Reports. (2010). National Center for Health Statistics*, Volume (58), 19.

➢ Steven Dowshen, M.D. (2009). *Heart disease, espanol*: The Nemours Foundation.

➢ The Lancet (2008). *Prevalence of Heart disease*, 371 (9622), 1435-1442.

➢ U.S. Preventive Services Task Force. (2009*). Aspirin for the prevention of cardiovascular diseas*e: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med* , 150, 396-404.

➢ *World Health Organization*. (2009). *"WHO Disease and injury country estimates"*

➢ Woodward, M., Bolton-Smith, C., Tunstall-Pedoe, H. (1994*). Deficient health knowledge, diet, and other lifestyles in smokers: is a multifactorial approach required? Prev Med*, 23 (3), 354-361