



ISSN: 0976-3031

Available Online at <http://www.recentscientific.com>

CODEN: IJRSFP (USA)

International Journal of Recent Scientific Research
Vol. 8, Issue, 11, pp. 21708-21714, November, 2017

**International Journal of
Recent Scientific
Research**

DOI: 10.24327/IJRSR

Research Article

SURVEY OF CARDIAC PATIENTS AT A TERTIARY CARE HOSPITAL ON FIVE PARAMETERS THAT REALISTICALLY INFLUENCED THEIR CARDIAC RISK

Raj kumar Kudari*, NagaSravya K and Gayatri P

Acharya Nagarjuna University

DOI: <http://dx.doi.org/10.24327/ijrsr.2017.0811.1124>

ARTICLE INFO

Article History:

Received 17th August, 2017
Received in revised form 21st
September, 2017
Accepted 05th October, 2017
Published online 28th November, 2017

Key Words:

Cardiac Risk, Tertiary Care Hospital,
DM(Diabetes Mellitus), HTN
(Hypertension), Past Medical History &
Hereditary.

ABSTRACT

Lot of factors influence cardiac risk depending on the individual's past medical history, family history, food, lifestyle and stress. WHO had listed 12 factors from the above parameters as main reasons for cardiac disorders. Stunning Contraries to standard assumptions of getting Cardiac Disorder was observed in a retrospective observational random survey on 150 Patients in a tertiary care hospital at Guntur, Andhra Pradesh, who had already suffered cardiac disorder and admitted in this hospital as in patients for treatment.

The Reports on past medical history parameter revealed that among the surveyed patients, 26% are those who do not have any disorder till now, which is contrary to the regular assumption. This is higher than the patients with any other disorder like HTN, DM or their combination. The Parameter on family history of having hereditary cardiac risk was surveyed and surprisingly 74% of patients do not have any inheritance of Cardiac Risk from their parents or among their Siblings. This is opposite to regular assumptions. There was only 4% among the surveyed subjects who had both Parents and Siblings affected. The influence of the Food Parameter was studied on 3 factors. Patients who had Heavy Meals twice daily are 93% who used to have NV diet regularly are 87% and Patients who had the habit of consuming Tea and Coffee beverages are 81%. The Lifestyle and Habits were surveyed as 4th parameter. Patients with Smoking habit are 45% and with alcohol consumption are 25%. Patients who do proper exercise are just 21% and hence they are at least risk. Stress as 5th parameter had influenced around 50% of the affected patients in form of family stress, work stress, anxiety and depression. Death of one of the members in the family had least impact. The parameters Past Medical History, Family History and Alcohol consumption had lower impact which is contrary to regular Assumptions.

Copyright © Raj kumar Kudari., NagaSravya K and Gayatri P, 2017, this is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Cardiovascular disease (CVD) is a group of disorders of the heart or blood vessels which includes coronary artery diseases (CAD) such as angina and myocardial infarction (commonly known as a heart attack). Other CVDs include heart failure, hypertensive heart disease, rheumatic heart disease, cardiomyopathy, heart arrhythmia, congenital heart disease, valvular heart disease, carditis, aortic aneurysms, peripheral artery disease, thrombo embolic disease, and venous thrombosis. Their mechanisms vary depending on the disease.

Types of Cardiovascular Diseases

Coronary heart disease: Coronary heart disease (CHD) is also called as Ischemic heart disease where in the blood vessels supplying blood to heart muscle are narrowed or blocked due to the deposition of cholesterol or clots on their walls. Coronary

heart disease includes stable angina, unstable angina, myocardial infarction, and sudden cardiac death.

- Stable Angina is chest pain or discomfort that most often occur with activity or emotional stress. Angina is due to poor blood flow through the blood vessels in the heart muscle (myocardium).
- Unstable Angina is a condition in which heart doesn't get enough blood flow and oxygen, by which it may lead to heart attack.
- Myocardial Infarction (MI) or acute myocardial infarction (AMI), commonly known as a heart attack occurs when blood flow stops to a part of the heart causing damage to the heart muscle.

Peripheral arterial disease: Peripheral artery disease (PAD) is a disease in which plaque builds up in the arteries that carry blood to head, organs, and limbs. Plaque is made up of fat,

*Corresponding author: Raj kumar Kudari
Acharya Nagarjuna University

cholesterol, calcium, fibrous tissue, and other substances in the blood. It affects blood vessels supplying the arms and legs.

Rheumatic heart disease: Active or Inactive disease of the heart that results from rheumatic fever, characterized by reduced functional capacity of the heart due to inflammatory changes in the myocardium or scarring of the valves. Rheumatic fever is caused by streptococcal bacteria.

Congenital heart disease: malformations of heart structure existing at birth. Signs and symptoms depend on the specific type of problem. Symptoms can vary from none to life-threatening.

Deep vein thrombosis & Pulmonary embolism: Blood clots in the leg veins, which can dislodge and move to the heart and lungs.

Heart attack is usually an acute event and is mainly caused by a blockage that prevents blood from flowing to the heart or brain. The most common reason for heart attack is fat deposition on the inner walls of the blood vessels.

Five Parameters Influencing Cardiac Risk

There would be lot of factors that influence cardiac risk depending on the individual's past medical history, family history, food, lifestyle and stress. WHO had listed influencing factors from the above parameters as main reasons for cardiac disorders.

1. Past medical history
2. Family history
3. Food
4. Lifestyle
5. Stress

Past Medical History

Hypertension

High blood pressure is harmful to the arteries and increases the risk of heart attack, heart failure and stroke. High blood pressure increases the heart's workload, causing the heart muscle to thicken and become stiffer. This stiffening of the heart muscle is abnormal, and causes the heart not to work properly.

Diabetes

Type2 diabetes is a major risk factor for coronary heart disease and stroke. If a subject can't control diabetes then they may develop cardiovascular diseases at an earlier age than other people. If a subject is a pre-menopausal woman, diabetes cancels out the protective effect of oestrogen and risk of heart disease rises significantly. People with diabetes and a raised cholesterol levels experience an even greater risk of heart disease than people without diabetes with the same level of cholesterol.

Hyperlipidemia

High total cholesterol, high levels of triglycerides, high levels of low-density lipoprotein or low levels of high-density lipoprotein (HDL) cholesterol increase the risk of heart disease. Cholesterol is accumulated when their diet is rich in saturated fats. A person's cholesterol level is also affected by age, sex,

heredity and diet. When other risk factors such as high blood pressure and tobacco smoke are present, this risk increases even more.

Family History

It is assumed that family history of cardiovascular disease indicates the subject the same risk. If a first degree blood relative had coronary heart disease or stroke before the age of 55 years (for a male relative) or 65 years (for a female relative) risk increases. Risk may also increase if close blood relatives experienced early heart disease. Children of parents with heart disease are more likely to develop it themselves. Most people with a strong family history of heart disease have one or more other risk factors. Just as like age, sex and race, we can't control family history also.

Food Factors

A healthy diet and food habits are more powerful weapons against cardiovascular diseases. The amount of food that taken daily can affect other controllable risk factors also. Products like poultry, fish, legumes, non-tropical vegetable oils, nuts, sweets, sugar-sweetened beverages, and red meats in unlimited quantities influence Cardiac Risk. High or frequent dietary intake of saturated fat, trans-fats and salt, and low intake of fruits, vegetables and fish are also linked to cardiovascular risk.

Life style factors

Smoking

Cigarette smoking is a powerful independent risk factor for sudden cardiac death in patients with coronary heart disease. Tobacco use, whether it is smoking or chewing tobacco increases risks of cardiovascular disease. Cigarette smoking, even a few times a day, increases the risk of heart disease. The risk is specifically high in male subjects who started smoking early in age than females. Passive smoking is also a risk factor for cardiovascular disease.

Physical Inactivity

Physical inactivity is an important contributor that increases the risk of heart disease by 50%. Regular, moderate-to-vigorous physical activity helps reduce the risk of heart and blood vessel disease. Even moderate-intensity activities help if done regularly and long term. Current recommendations for exercise are at least 2.5hours/150 minutes of moderate activity or 75 minutes of rigorous activity per week for adults.

Alcohol

Alcohol in moderation may reduce the risk of heart disease. However, drinking too much alcohol places health at risk in a number of ways. It can raise blood pressure, increase risk of cardiomyopathy with stroke, cancer and other diseases. This is because when taken in excess, alcohol is harmful to the heart and other organs. It can directly damage the heart muscle and cause irregular beating of the heart. Alcohol also contributes to weight gain, high triglycerides, high blood pressure.

The National Institute on Alcohol Abuse and Alcoholism defines one drink as 1-1/2 fluid ounces (floc) of 80-proof spirits (such as bourbon, Scotch, vodka, gin, etc.), 5 floc of wine or 12 floc of regular beer.

Stress Factors

A chronically stressful life, social isolation, anxiety and depression increase the risk of heart disease. Stress can exacerbate symptoms in people with pre-existing heart disease, and can contribute to high blood pressure. Simple breathing exercises, sports, music, meditation, reading, engaging in hobbies, taking a walk there are many ways to reduce stress. These factors may affect established risk factors. For example, people under stress may overeat, start smoking or smoke more than they otherwise would.

Objective

To take up a random Patient-Survey on at least 120-150 Cardiac Patients at a Tertiary care Hospital for analyzing the extent of influence of the said Five Parameters, in subjecting them to cardiac risk.

To understand whether the mentioned 5 parameters influence cardiac disorder or not.

To capture the group that is more vulnerable for cardiac risk.

To draw statistical expressions on the study in relation to cardiac risk of the surveyed Patients.

METHDOLOY

An attempt was made to study the influence of these 5 parameters in our local tertiary care hospital at Guntur, Andhra Pradesh. A retrospective observational random survey of 150 Patients was recorded who had already suffered cardiac disorder and admitted in this hospital as in patients for treatment. The total sample number was 150 cardiac patients who participated at random.

Study site

We had conducted the study in tertiary care hospital in Guntur.

Study design:

Retrospective, Observational Study

Study period:

Six Months period i.e., from November 2016 to April 2017

Inclusion criteria

- Age: 20-85yrs
- Both males and females
- Inpatients

Cardiac patients taking treatment for IHD, MI, Heart failure, ASD in adults

Exclusion criteria

- Age group below 20
- Subjects those who can't hear and respond properly.

Study Procedure

Questionnaire having 30 questions had been framed to interview subjects that are under treatment for cardiac disease regarding the following 5 parameters

- Past Medical History,
- Family History,
- Food,
- Lifestyle and

- Stress.

Demographic information and knowledge about their disease and medication are also included in questionnaire. Raw Data was collected in the form of answers for the questionnaire. Each answer was given a score in increasing order of deterioration. Diagnosis of specific cardiac disease was also noted to know the prevalence. The subjects are enrolled on daily basis. From the total scoring for each patient parameter wise, statistical expressions were drawn in the form of Bar Diagrams. Certain conclusions were elucidated on specific criteria regarding Patients relative to parameters and Results Reported.

RESULTS

Past Medical History

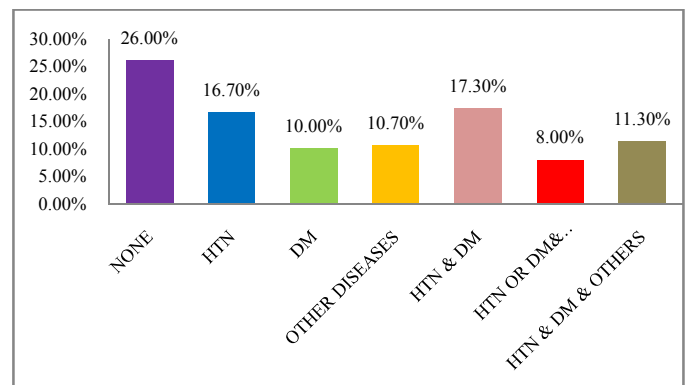
150 Cardiac in-Patients were questioned on their previous disorders that they suffered, till now. They were made into 7 groups depending upon the ailment they suffered. The number of patients falling in that group was expressed as percentage to that of total surveyed patients. The table is prepared in decreasing order of the risk levels observed.

Observation of Past Medical History

| Groups of Patients Affected (in Decreasing Order) | Percentage of Patients Falling In Each Group (%) | Risk Levels Observed |
|---|--|----------------------|
| No Past Medical History | 26.0% | Highest Risk |
| Patients with HTN+DM | 17.3% | High Risk |
| Patients with only HTN | 16.7% | High Risk |
| Patients with HTN + DM + Other Disorders | 11.3% | Medium Risk |
| Other Disorders | 10.7% | Medium Risk |
| Only DM | 10.0% | Low Risk |
| HTN/DM+Other Disorders | 8.0% | Low Risk |

Bar Chart of Past Medical History

(On x-axis we had taken past medical history and on y-axis number of subjects.)



The survey on this parameter revealed that among the surveyed patients, 26% are those who do not have any disorder till now. This is higher than the patients with any other disorder like HTN, DM and other disorders. This is in contrary to the general assumption which states that DM and HTN are more likely to develop Heart Disease.

Family History

150 Patients were questioned on their family history whether any of their parents or siblings had suffered Cardiac Risk. They were made into 5 groups depending upon the suffered members

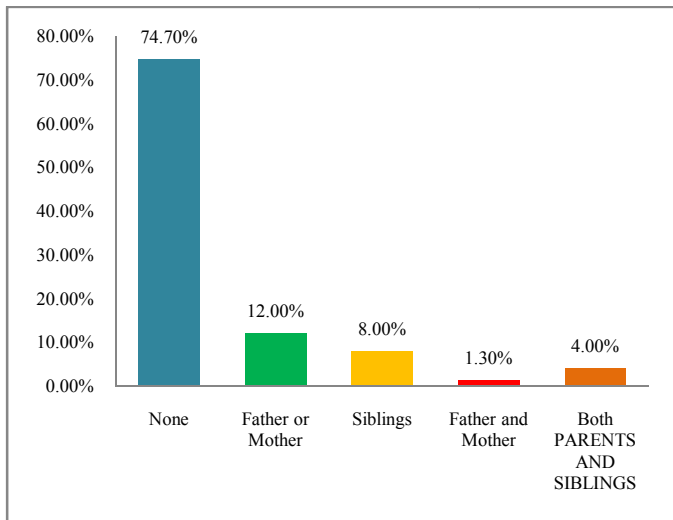
in the family. The number of patients falling in that group was expressed as percentage to that of total surveyed patients. The table is prepared in decreasing order of the risk levels observed.

Observation of Family History

| Family and Genetical History | No. of Patients Falling In This Group | Percentage of Patients Falling In Each group (%) | Risk levels Observed |
|---|---------------------------------------|--|----------------------|
| Patients whose parents or Siblings were not Affected (No Inheritance) | 112 | 74.7 | High Risk |
| One of the Parents Affected | 18 | 12 | Low Risk |
| Siblings Affected | 12 | 8 | Low Risk |
| Both Parents and Siblings Affected | 6 | 4 | Low Risk |
| Both Parents Affected | 2 | 1.3 | Low Risk |

Bar Chat of Family History

(On x-axis we had taken family history and on y-axis we had taken number of subjects)



The Parameter on family history of having hereditary cardiac risk revealed that 74% of patients do not have any inheritance of Cardiac Risk from their parents or their Siblings affected. There was only 4% among the surveyed subjects who had both Parents and Siblings affected. These findings are in contrary to the regular Assumptions.

Food Factors

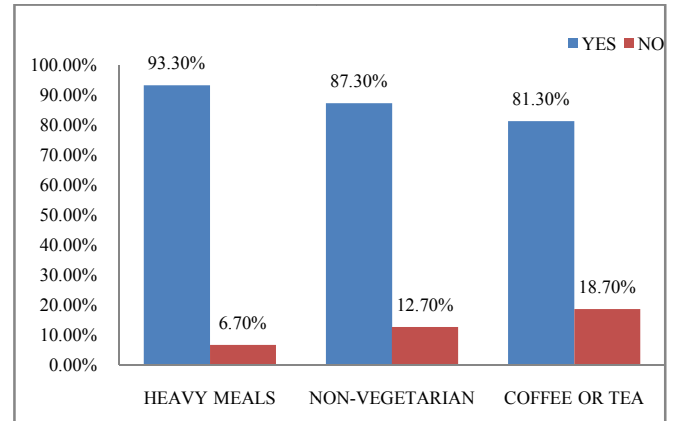
150 Patients were questioned on their foods they take and its frequency. They were made into 3 groups depending upon the type of food other beverages they take. The number of patients falling in that group was expressed as percentage to that of total surveyed patients. The table is prepared in decreasing order of the risk levels observed.

Observation of Food Factors

| Group of patients affected by their food factors | Percentage of patients falling in each group (%) | Risk levels Observed |
|--|--|----------------------|
| Heavy Meals | 93.3% | Moderate Risk |
| Non-Vegetarian | 87.3% | Moderate Risk |
| Coffee or Tea | 81.3% | Insignificant |

Bar Chart of Food Factors

(On x-axis we had taken food factors and on y-axis we had taken number of subjects)



The influence of food parameter was studied on 3 factors. Patients who had heavy meals twice daily are 93% who used to have NV diet regularly are 87% by which it reveals that patients were moderately risked to cardiac diseases. Patients who had the habit of consuming tea and coffee are 81% which is insignificant for cardiac Disorder. The levels of risk were according to the regular Assumptions.

Lifestyle Factors

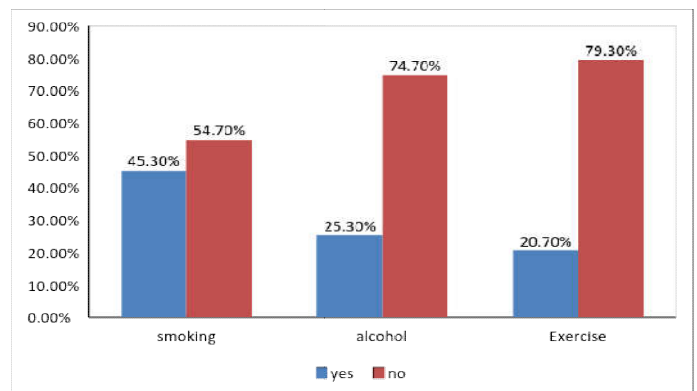
150 Patients were questioned on their Lifestyle and habits. They were made into 3 groups depending upon different lifestyles and habits they have (Smoking, Alcohol and Exercise). The number of patients falling in that group was expressed as percentage to that of total surveyed patients. The table is prepared in decreasing order of the risk levels observed.

Observation of Lifestyle Factors

| Group of patients affected by their lifestyle factors | Percentage of patients falling in each group (%) | Risk levels Observed |
|---|--|----------------------|
| Smoking | 45.3% | Medium Risk |
| Alcohol | 25.3% | Medium Risk |
| Exercise | 20.7% | Medium Risk |

Bar Chart of Lifestyle Factors

(On x-axis we had taken lifestyle factor and on y-axis we had taken number of subjects)



Patients with smoking habit were 45%, with alcohol consumption were 25% and who did not had proper exercise

are 79.3% and hence they were at risk These findings are according to the general Assumptions.

Stress Factor

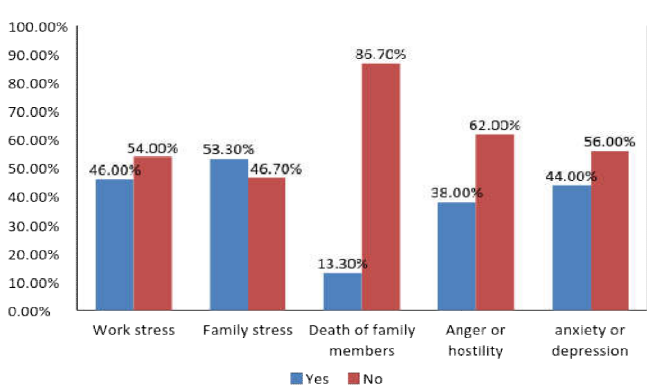
150 Patients were questioned on the type of stress they have. Their stress is categorized into 5 categories like family stress, work stress, anxiety or depression, anger or hostility and death of any one among family members. The number of patients falling in that group was expressed as percentage to that of total surveyed patients. The table is prepared in decreasing order of the risk levels observed.

Observation of Stress Factors

| Group of Patients Affected By Their Stress Factors (Decreasing Risk) | Percentage of patients falling in each group (%) | Risk levels observed |
|--|--|----------------------|
| Family stress | 53.3% | Medium Risk |
| Work stress | 46.0% | Medium Risk |
| Anxiety or Depression | 44.0% | Medium Risk |
| Anger or Hostility | 38.0% | Medium Risk |
| Death of Family members | 13.3% | Low Risk |

Bar Chart of Stress Factors

(On x-axis we had taken stress factors and on y-axis we had taken number of subjects)



Among stress factors, family problems had influence about 80% and work stress of about 60% and death of any one of the family members had least impact.

DISCUSSION

According to our study the past medical history, family history and food factors shown slightly decreased risk compared to lifestyle. Stress had shown greater risk. Patients with no past medical history were more affected than the patients with other disorders. Next followed group of patients suffering with Hypertension along with diabetes mellitus, then patients with only HTN, later patients with HTN with DM along with other complications, and finally patients with complications like asthma, thyroid and brain stroke. Individuals with family (genetic) history plays minor role compared to other risk factors such as past medical history, stress and lifestyle factors.

People who take non-vegetarian or heavy meals or drink coffee and tea compared to who those doesn't take them are more likely to suffer with heart problem. Males almost who smoked has developed cardiac problems. Alcohol is a protective factor for those who maintained the limit of consumption but who drink more quantity daily has developed cardiac problems. Majority of patients included in our study do not have physical activity. The family stress had become common for most of the individuals compared to other types of stress such as work load, death of family member. The individual stress factor had limited risk but overall risk factors increased the individual development of cardiac Disorders. The survey reveals few Contraries when studied practically in reference to standard assumptions.

CONCLUSION

Our study concludes that age group of 41-60yrs lay open to cardiac risk based on selected 5 parameters. Males and females almost have similar risk for cardiac failure leading to no gender differentiation.

| Parameter | Assumed risk factors as per World heart organizations | Observed report during survey |
|-------------------------|--|--|
| 1. Past medical history | <ol style="list-style-type: none"> If you develop diabetes you are at greater risk of developing cardiovascular disease. Clinical manifestations of Hypertension and Atherosclerosis include cardiac risks. | <p>Study on this parameter revealed that among the surveyed patients, 26% are those who do not have any disorder till now.</p> <p>This is higher than the patients with any other disorder like HTN, DM and other disorders. This is in contrary to the general assumptions. Family history of having hereditary cardiac risk revealed that 74% of patients do not have any inheritance of Cardiac Risk from their parents or their Siblings.</p> |
| 2. Family history | <ol style="list-style-type: none"> If a first-degree male relative (e.g. father, brother) has suffered a heart attack before the age of 55, or if a first-degree female relative has suffered one before the age of 65, you are at greater risk of developing heart disease. If both parents have suffered from heart disease before the age of 55, your risk of developing heart disease can rise to 50% compared to the general population. Studies have shown a genetic component for both hypertension and abnormal blood lipids, factors related to the development of cardiovascular disease. | <p>There was only 4% among the surveyed subjects who had both Parents and Siblings affected.</p> <p>These findings are in contrary to the regular Assumptions.</p> |
| 3. Food | <ol style="list-style-type: none"> Obesity is one of the major risk factors for CVD. The overall human population is getting heavier as shown by the increasing rates of obesity. All individuals should be strongly encouraged to take at least 30 minutes of moderate physical activity (brisk walking) a day. | <p>Food parameter was studied on 3 factors. Patients who had heavy meals twice daily are 93%.</p> <p>Patients who had NV diet regularly are 87% by which it reveals that patients were moderately risked to cardiac diseases. Patients who had the habit of consuming tea and coffee are 81% which is insignificant for cardiac Disorder. The levels of risk were according to the regular Assumptions. Patients with smoking habit were 45%, with alcohol consumption were 25% and who did not had proper exercise are 79.3% and hence they were at risk.</p> <p>The findings are according to general Assumptions.</p> |
| 4. Lifestyle | <ol style="list-style-type: none"> Smoking promotes cardiovascular disease through a number of mechanisms Individuals who take more than 3 units of alcohol per day should be advised to reduce alcohol consumption. | <p>Among stress factors, family problems had influenced about 80% and work stress of about 60% and death of any one of the family members had least impact.</p> |
| 5. Stress | <ol style="list-style-type: none"> Psychosocial factors, such as hostility and type A behaviour patterns, and anxiety or panic disorders, show an inconsistent association in a meta-analysis of studies of depression as a predictor for coronary heart disease. Depression was shown to be a predictor for risk of myocardial infarction in the Inter heart case-control study. | |

The study states that all 5 parameters had shown cardiac risk.

The objectives of this study to understand whether the mentioned 5 parameters can influence cardiac disorder or not were successfully fulfilled. The group of subjects with no previous history of DM, HTN and group of persons without family inheritance of the cardiac disorder were also captured to be vulnerable for the risk. Degree of risk to cardiac disorders was also expressed parameter wise. Further studies should be conducted on large population for information about other parameters that are to be taken into consideration.

References

1. ShanthiMendis, PekkaPuska, Bo Norrving. World Health Organization. (2011). Global Atlas on Cardiovascular Disease Prevention and Control (PDF). World Health Organization in collaboration with the World Heart Federation and the World Stroke Organization. pp. 3-18. ISBN 978-92-4- 156437-3.
2. Prof Christopher J L Murray. (2013). Global, regional, and national age-sex specific all-cause and cause-specific mortality for 240 causes of death, 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. NCBI Lancet. 2015 Jan 10; 385(9963): 117-171.
3. McGill HC, McMahan CA, Gidding SS. (March 2008). "Preventing heart disease in the 21st century: implications of the Pathobiological Determinants of Atherosclerosis in Youth (PDAY) study". AHA Journals 2008;117:1216-1227
4. Spinks A, Glasziou PP, Del Mar CB. (5 November 2013). "Antibiotics for sore throat". The Cochrane Database of Systematic Reviews. 11:CD000023.
5. Sutcliffe P, Connock M, Gurung T, Freeman K, Johnson S, Ngianga-Bakwin K. (2013). "Aspirin in primary prevention of cardiovascular disease and cancer: a systematic review of the balance of evidence from reviews of randomized trials". PLOS ONE. 8 (12): e81970.
6. Sutcliffe P, Connock M, Gurung T, Freeman K, Johnson S, Kandala. (September 2013). "Aspirin for prophylactic use in the primary prevention of cardiovascular disease and cancer: a systematic review and overview of reviews". 2013 Sep;17 (43):1-253.
7. Mark Espeland. (2007). Reduction in Weight and Cardiovascular Disease Risk Factors in Individuals With Type 2 Diabetes: One-Year Results of the Look AHEAD Trial. Diabetes Care March 2007, DOI: <https://doi.org/10.2337/dc07-0048>
8. Paul E ronlsley. (2011). Association of alcohol consumption with selected cardiovascular disease outcomes: a systematic review and meta-analysis. BMJ 2011; 342 22 February 2011.
9. Koen van der kooy. (2007). Depression and the risk for cardiovascular diseases: systematic review and meta-analysis, 19 january 2007 doi:10.1002/gps.1723
10. Simon JA. (1992). Vitamin C and cardiovascular disease: a review. PubMed. April 1992,11(2):107-25
11. Ethan M. Balk. (2006). Effects of omega-3 fatty acids on serum markers of cardiovascular disease risk: a systematic review published in Science Direct. Volume 189, Issue 1, November 2006, Pages 19-30.
12. MedicineNet.com. Medical Definition of cardiovascular and symptoms <http://www.medicinenet.com/script/main/art.asp?articlekey=18311>
13. World Health Organisation. Definition of Cardiovascular diseases. [http://www.euro.who.int/en/health-topics/noncommunicable-diseases/cardiovascular-diseases2/definition-of-cardiovascular-diseases](http://www.euro.who.int/en/health-topics/noncommunicable-diseases/cardiovascular-diseases/cardiovascular-diseases2/definition-of-cardiovascular-diseases)
14. What are coronary heart disease risk factors? by NIH. <https://www.nhlbi.nih.gov/health/health-topics/topics/hd>
15. <https://www.google.co.in/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=coronary+heart+disease+symptoms>
16. Coronary Heart Disease and Risk factors by British Heart Foundation <https://www.bhf.org.uk/heart-health/conditions/coronary-heart-disease>
17. Coronary artery disease (CAD): symptoms and risk factors. https://en.wikipedia.org/wiki/Coronary_artery_disease
18. Stable Angina: MedlinePlus. causes, risk factors, symptoms, tests. <https://medlineplus.gov/ency/article/000198.htm>
19. Unstable Angina: MedlinePlus causes, risk factors, symptoms, tests. <https://medlineplus.gov/ency/article/000201.htm>
20. Myocardial infarction: introduction, symptoms and risk factors. https://en.wikipedia.org/wiki/Myocardial_infarction
21. Peripheral artery disease overview and outlook by NIH. <https://www.nhlbi.nih.gov/health/health-topics/topics/pad>
22. Peripheral artery disease causes by NIH National Heart, Lung, Blood Institute www.nhlbi.nih.gov/health/health-topics/topics/pad/causes.
23. What are the signs and symptoms of peripheral artery disease by NIH. www.nhlbi.nih.gov/health/health-topics/topics/pad/signs
24. www.google.co.in/webhp?sourceid=chromeinstant&ion=1&espv=2&ie=UTF-8#q=rheumatic+heart+disease+definition
25. Rheumatic fever introduction and signs and symptoms and prevention. https://en.wikipedia.org/wiki/Rheumatic_fever#Signs_and_symptoms
26. <https://www.google.co.in/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=rheumatic+heart+disease+causes>
27. <https://www.google.co.in/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=congenital+heart+disease>
28. Congenital heart disease: introduction, symptoms, risk factors. https://en.wikipedia.org/wiki/Congenital_heart_defect
29. Risk factors[edit] Acquired Older age Major surgery and orthopedic surgery[20] Cancers, especially of the bone, ovary, brain, pancreas, and lymphomas[13] Inactivity and immobilization.

30. Joel E. Dimsdale MD.(2008). Psychological Stress and Cardiovascular Disease. *Journal of the American College of Cardiology* Volume 51, Issue 13, 1 April 2008, Pages 1237-1246 <https://doi.org/10.1016/j.jacc.2007.12.024>
31. Julia A. Critchley, MSc, DPhil. (2003). Mortality Risk Reduction Associated With Smoking Cessation in Patients With Coronary Heart Disease: A Systematic Review. *JAMA*. 2003; 290(1):86-97.
32. Tran DM.(2015). Cardiovascular risk factors in young adults: a literature review. *PubMed*. 2015 Jul-Aug;30(4):298- 310.
33. Diamond, Eric L. (1982). The role of anger and hostility in essential hypertension and coronary heart disease. 1982 Sep;92(2):410-33.
34. Henrikbogild and Andersknutssonscandinavian. (1999). Shift work, risk factors and cardiovascular disease. *journal of work*, vol.25,no. 2 April 1999, pp. 85-89.
35. Dominique L. Musselman, MD. (1998). The relationship of depression to cardiovascular disease epidemiology, *biology and treatment*. 1998 Jul;55(7):580-92.
36. Kenneth E. Powell. (1987). *Annu. Rev. Public Health* 1987.8:253-287. Downloaded from www.annualreviews.org Access provided by 157.48.12.52 on 04/03/17. For personal use only.
37. Marckmann P, GronbaekM. (1999). Fish consumption and coronary heart disease mortality. A systematic review of prospective cohort studies. published in *European Journal of Clinical Nutrition* 01 Aug 1999
38. Understand Your Risks to Prevent a Heart Attack by AHA. http://www.heart.org/HEARTORG/Conditions/HeartAttack/UnderstandYourRiskstoPreventaHeartAttack/Understand-Your-Risks-to-Prevent-a-Heart-Attack_UCM_002040_Article.jsp#
39. Risk Factors for cardiovascular disease(CVD), the common risk factors. https://heartuk.org.uk/files/uploads/documents/huk_fs_mfsI_riskfactors_forchd_v2.pdf
40. Cardiovascular disease risk factors by World Health Organisation. <http://www.world-heart-federation.org/press/factsheets/cardiovascular-disease-risk-factors/>
41. James R. Sowers. (2001). Diabetes, Hypertension and cardiovascular disease, an update: review article published in *AHA journals* 1 April 2001. 2001;37:1053-1059
42. Joseph L. Goldstein. (1973). Hyperlipidemia in Coronary Heart Disease I. Lipid Levels In 500 Survivors of Myocardial Infarction.1973 Jul;52(7):1533-43.
43. Nicolas Ochs. (3 JUNE 2008) Subclinical Thyroid Dysfunction and the Risk for Coronary Heart Disease and Mortality: Meta-analysis.
44. E Barrett-Connor, K Khaw. (1984). Family history of heart attack as an independent predictor of death due to cardiovascular disease. 1984 Jun;69(6):1065-9
45. C A Brown. (1993). Coffee and tea consumption and the prevalence of coronary heart disease in men and women: results from the Scottish Heart Health Study. 1993 Jun; 47(3): 171–175.
46. M Woodward, H Tunstall-Pedoe. (1999). Coffee and tea consumption in the Scottish Heart Health Study follow up: conflicting relations with coronary risk factors, coronary disease, and all cause mortality. 1999 Aug; 53(8): 481-487.
47. Menl Hjermand. (1981). Effect Of Diet And Smoking Intervention On The Incidence Of Coronary Heart Disease: Report from the Oslo Study Group of a Randomised Trial in Healthy. 1981 Dec 12;2(8259):1303-10.
48. Carole L Hart. (1999). Alcohol consumption and mortality from all causes, coronary heart disease, and stroke: results from a prospective cohort study of Scottish men with 21 years of follow up. *BMJ* 1999; 318
49. Pekka Jousilahti. (1999). Sex, Age, Cardiovascular Risk Factors, and Coronary Heart Disease A Prospective Follow-Up Study of 14 786 Middle- Aged Men and Women in Finland. 1999;99:1165-1172

How to cite this article:

Raj kumar Kudari *et al.* 2017, Survey of Cardiac Patients At A Tertiary Care Hospital On Five Parameters That Realistically Influenced Their Cardiac Risk. *Int J Recent Sci Res.* 8(11), pp. 21708-21714.
DOI: <http://dx.doi.org/10.24327/ijrsr.2017.0811.1124>
