A population - based study on Awareness of Cardiovascular Disease Risk Factors

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ABSTRACT

Objective: The study was to assess the level of Knowledge and Awareness of Cardiovascular Disease Risk Factors in a selected population. **Materials and Methods:** Population - based study was carried out in people above 30 years of age. Heart Disease Fact Questionnaire (HDFQ) was used to assess the level of knowledge and awareness of risk factors during face- to -face interview with the participants. **Results:** The percentage of participants who were aware about risk factors were 48% and 52% were unaware. Among risk factors, Over weight was ranked as the most common, followed by high cholesterol level (98%), high blood pressure (94%) and Smoking (92%).The participants were also aware about regular physical activity and exercise to lower risk factors for the heart disease. **Conclusion:** This study revealed the need for increasing awareness among the population utilizing community based education programs.

Keywords: Cardiovascular disease, risk factors, knowledge, awareness.

INTRODUCTION

Cardiovascular diseases (CVDs) are group of disorders of heart and blood vessels. According to WHO, heart disease especially coronary heart disease is the leading cause of death globally and one of the major health burdens worldwide. It has been predicted that these diseases will increase rapidly in India and this country will be host to more than half the cases of heart disease in the world.[1]

WHO noted that CVD has no geographic, socioeconomic or sex boundaries. It is estimated that far from being confined to the most developed countries, cardiovascular disease is the leading cause of death in developing countries as well. 80% of CVD death is contributed by countries with low and middle income.

Some people are at greater risk of cardiovascular disease than others. Factors linked to an increased risk of CVD are family history, age, sex, cigarette smoking, excessive alcohol consumption, abnormal lipid and lipoproteins, high blood pressure, high blood glucose, physical inactivity, Overweight and Obesity.[2]

It is estimated that 23.3 million people will die by 2030, because of cardiovascular disease. high blood pressure, high cholesterol level, high Blood glucose level, smoking, obesity and physical inactivity are conventional risk factors.[3] Although cardiovascular disease occurs in the middle age or later, risk factors (smoking, dietary factors etc) are determined to great extend by behaviors learnt in childhood and continued to adulthood.[4]

Adherence to healthy nutritional and lifestyle recommendations can play an essential role in the prevention of CVD.[5] In order to encourage people to adopt a cardio protective lifestyle; little is known about knowledge of cardiovascular risk factors in general population. Knowledge is an essential step in developing a more cardio protective lifestyle.[6] Socioeconomic indicator "education" is a strong predictor of cardiovascular risk factor knowledge. Higher knowledge is associated with higher education. Socioeconomic polarization could partly explain the fact that a low socioeconomic position has been associated with higher morbidity and mortality of chronic diseases[7].

MATERIAL AND METHODS

Study design and Sample

A Prospective study was carried out in a randomly selected population for a month in a Multispecialty Hospital. The study was to assess their knowledge regarding Cardiovascular Disease Risk Factors. Individuals who did not have a Communication Problem and perception problem (dementia, Schizophrenia) were included in the study. A total of 50 participants who met the eligible criteria were selected and interviewed face -to -face using HDFQ Questionnaire.

RESULTS AND DISCUSSION

50 participants were included in the study, 30 (60%) male and 20 (40%) female within 30 – 70 years of age, over a period of one month.

This study was carried out to evaluate the Knowledge of risk factors for cardiovascular disease among the adult population. Based on Heart Disease Fact Questionnaire (HDFQ) Questionnaire, 48% of participants were able to acquire a score of 20and above from a total of 25, where as 52% of participants scored below 20.

Overweight was considered as a major risk factor (100%) for heart disease by the participants followed by high cholesterol level (98%) ,High blood pressure level (94%) and Smoking (92%).

Few participants were unaware of older age being a greater risk factor (10%) while some participants did not know family history of heart disease (32%), diabetes as co-morbidity (20%) as risk factors. 66% knew that male diabetic patients are at higher risk when compared to female diabetic patients. Regular physical activity (90%) and exercising at gym (92%) were considered as factors that help lower chances of developing heart disease, by the participants.

Table 1: Demographic Characteristics		
Characteristics	**n**	**%**
Age		
30 – 39	16	32
40 – 49	17	34
50 – 59	14	28
60 – 69	3	6
Gender		
Male	30	60
Female	20	40
Education		
Lower than High School	27	54
High School or beyond	23	46
Occupation		
Currently employed	28	56
Unemployed	22	44
Residence		
Rural	34	68
Urban	16	32

CONCLUSION

In this study, half of the participants were fairly aware of the cardiovascular risk factors. Smoking, high blood pressure, hyperlipidemia and obesity as risk factors were known to most of the participants. The main finding of the study is that the majority of the populations were unaware about the association of risk factors such as age and family history with cardiovascular disease when in fact these risk factors are early predictors for the same. Only few participants knew that patients with diabetes have low HDL cholesterol and male diabetic patients are at higher risk when compared to female. The study calls for the importance of educating the population about the various risk factors especially age,

Table 2: Correctly answered questions from the Heart Disease Fact Questionnaire

Question	n	%
Smoking is a risk factor for Heart disease	46	92%
High Blood pressure is a risk factor for Heart Disease	47	94%
High cholesterol is a risk factor for developing Heart disease	49	98%
Being overweight increases a person's risk for Heart disease	50	100%
Regular Physical activity will person's chance of getting Heart disease	45	90%
Only exercising at a gym or in a class will help lower a person's chance of developing heart disease	46	92%

Table 3: Incorrectly answered questions from Heart Disease Fact Questionnaire

Question	n	%
The older a person is ,the greater the risk of having Heart disease	5	10%
If you have a family history of heart disease you are at a risk for developing heart disease	16	32%
People with diabetes tend to have low HDL Cholesterol	10	20%
Men with diabetes have a higher risk than women with diabetes	33	66%

family history and co-morbid conditions to prevent cardiovascular diseases as well as improve the quality of life of people with heart disease.

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