Original Article

Modifiable risk factors of cardio vascular diseases among adults an assessment

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Abstract

Back ground: Cardiovascular disease has become the major killer and leading cause of death in world- wide due to vast changes in the lifestyle of people. **Objectives:** To assess the modifiable risk factors of (CVD) among adults at selected community. **Methodology:** 75 Subjects of aged 20 to 60 years were selected. Structured interview schedules were used for data collection. **Results:** Study finding revealed that 100%. of all samples had at least one risk of modifiable risk factor. In the assessment of bio-physiological factors the data revealed that 4(5.3%) had no risk, 44(58.7%) had mild risk, 23(30.7%) had moderate risk and 4(5.3%) had high risk. In life style factor assessment,72 (96%) had mild risk and 3(4%)had moderate risk. Assessment of physical activity revealed, 2(2.6%) had mild risk, 29(38.7%) had moderate risk and 44(58.7%) had high risk. In the assessment of dietary pattern, 5(6.6%) had mild risk, 62(82.7%) had moderate risk and 8(10.7%) had high risk. **Discussion:** All the subjects had one or more risk factors: The results revealed that there was statistically significant association was found with selected demographical variables like education and income. Hence as life style changes (unhealthy diet, physical inactivity and habits) are 96 % found to be main modifiable risk factors of cardiovascular disease. **Conclusions:** The study suggests that if the risk subjects for CVD may modify their life style and diet habits they can survive long time.

Key words: CVD- risk factors – modifications – ensure survivorship

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INTRODUCTION

Cardio Vascular Disease (CVD) is the major cause of illness and the leading causes of death world wide ranging first in both developing and developed national. The total number of death annually, due to CVD is more than 17 million, approximately 29% of all deaths. WHO, data revealed that more than 80% of all cardio vascular deaths are occurred in developing countries compared to the developed countries. WHO(2005) revealed that the total number of CVD death has increased globally to 17.5 million from 14.4million in 1990 and it estimates there will be about 20 million Cardio Vascular Diseases death in 2015 accounting for 30% of all death worldwide by 2030[1]. Currently, about 2.7 million die of CVD and this is projected to increase by 1.5 million by 2030. Estimates indicate that currently there are about 30 million coronary heart disease (CHD) patients, with 14 million residing in rural and 16 million in urban areas. The prevalence of CHD in those aged ≥ 20 years ranges from 6.6% - 12.7% in urban and 2.1% - 4.3% in rural India. During the past few decades, CHD prevalence has increased almost fourfold in rural areas and six fold in urban areas as a result of varied health transitions[2]. Most cardiovascular diseases can be prevented by addressing behavioural risk factors such as tobacco use, unhealthy diet and obesity, physical inactivity and harmful use of alcohol using population-wide strategies. People with cardiovascular disease or who are at high cardiovascular risk (due to the presence of one or more risk factors such as hypertension, diabetes, hyper lipidaemia or already established disease) need early detection and management using counselling and medicines, as appropriate[3].The Nurse must ensure that the client is appropriately advised regarding lifestyle modifications such as diet, weight control, stress management and exercise [4].

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METHODOLOGY

In this study, quantitative research approach and descriptive research design were adopted. Samples were selected by using non probability convenient sampling technique. The study was conducted at Ayappakkam village. 75 samples that fulfilled sample selection criteria were selected. Risk assessment questionnaire which included, General risk factors, Assessment of bio physiological risk factors, Life style factors, Physical activity and Dietary pattern was administered. Data were collected by interview method and data were analyzed and interpreted by using descriptive and inferential statistics.

RESULTS

Table 1: Percentage distribution of life style and bio-physiological factors:

Sl. No	Level of risk	Life style		Bio-physiological	
		Frequency	%	Frequency	%
1	No risk	4	5.3	0	0.0
2	Mild	44	58.7	72	96.0
3	Moderate	23	30.7	3	4.0
4	High	4	5.3	0	0.0
	Total	75	100.0	75	100.0

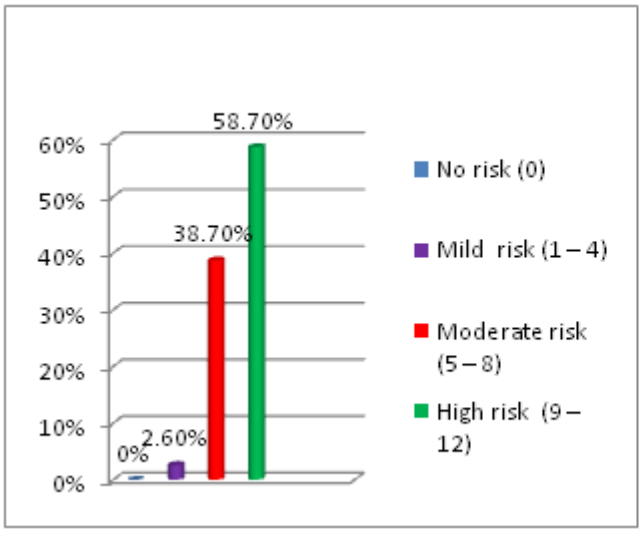

Figure 1: Percentage distribution of risk factors

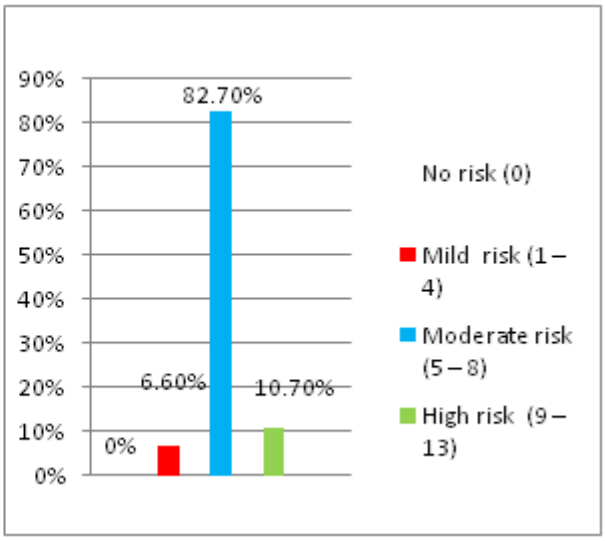

Figure 2: Percentage distribution of dietary factors

Study finding revealed that 100 percent of all samples had at least one risk of modifiable risk factor. In the assessment of bio-physiological factors the data revealed that 4(5.3%) had no risk, 44(58.7%) had mild risk, 23(30.7%) had moderate risk and 4(5.3%) had high risk. In life style factor assessment,72 (96%) had mild risk and 3(4%)had moderate risk. Assessment of physical activity revealed, 2(2.6%) had mild risk, 29(38.7%) had moderate risk and 44(58.7%) had high risk. In the assessment of dietary pattern, 5(6.6%) had mild risk, 62(82.7%) had moderate risk and 8(10.7%) had high risk. The analysis revealed that there was statistically significant association was found on bio physiological factors of cardio vascular disease with income (χ^2 = 33.730, P <0.05). The lifestyle factors with sex was associated (χ^2 = 7.577, P <0.01). The physical activities with gender was (χ^2 = 6.573, P <0.05) associated. The occupation (χ^2 = 18.676, P<0.05) and dietary pattern with educational status were (χ^2 = 16.417, P <0.05).

DISCUSSIONS

The risk factors of CVD had been strongly associated with their demographic profiles such as income, gender, occupation and dietary pattern. These demographical profiles are to be modifiable by respective measures in the life style of study subjects. Based on the results and discussions the above said research hypothesis was accepted.

CONCLUSION

The above study which was conducted to assess the modifiable risk factors of cardiovascular diseases revealed that life style factors such as diet, physical activity, irregular sleep, stressful family, work environment, chewing tobacco and consumption of smoking and alcohol have played a vital role in increasing in diseases burden in cardio vascular system. By communicating these results, creates awareness on modifiable risk factors of cardio vascular diseases among adults. Though this seems to be a small community health survey but it adds on the risk factors prevalent in the community set-up and thus focuses the attention of cardiovascular epidemiologist and researcher to conduct more studies.

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