Knowledge Regarding Prevention of Atherosclerosis Among Young Adults

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Abstract

➢ *Introduction*

Atherosclerosis is responsible for 50% of all death in Weston societies and it is a chronic inflammatory disease of arteries[1]. Heart attacks, stroke and peripheral arterial diseases are developed by atherosclerotic diseases. The incidence is difficult to measure accurately due to its asymptomatic condition. Over 370,000 death occurs annually due to coronary heart disease in the modernized society. Men over 45 years are more predominant to develop plague rupture and it contributes 75% of myocardial infarctions[1]. 90% cardiovascular disease related death can be prevented by lifestyle changes.

➢ *Methods*

A descriptive study was conducted to evaluate the knowledge of younger adults on prevention of atherosclerosis in outpatient department, Baptist hospital, Bangalore. Hundred voluntaries are enrolled to the study and prior consent was taken.

➢ *Results*

The mean age of the study participant are 29.4 ± 5.2 years and 53.0% were males and 47.0% were females. 34.0% are graduates. In the regards to level of knowledge it was classified as adequate, moderate and Inadequate and the result is 27.0%, 56.0% and 17.0% respectively. The chi-square value of $\chi^2 = 4.29$ (p=0.116) between Educational status and level of knowledge and $\chi^2 = 4.76$ (p=0.092) between gender and level of knowledge shows, there is no statistically significant associations. Pearson correlation coefficient was calculated for age and income with knowledge. The $r = 0.08$ (p=0.434) of age and knowledge, $r = -0.05$ (p=0.632) of income and knowledge both shows negligible correlation with no significance.

➢ *Conclusion*

This study concludes that the knowledge on prevention of atherosclerosis among young adults are moderate and there is no relationship was observed with knowledge and educational status, gender, age and income. This result may suggest to have awareness programme on prevention of atherosclerosis among young adults to improve their lifestyle by enhancing the knowledge.

Keywords:- *Athrosclerosis, Younger Adults, Cardiovascular Disease, Knowledge On Prevention.*

I. INTRODUCTION

Atherosclerosis is responsible for 50% of all death in Weston societies and it is a chronic inflammatory disease of arteries[1]. Heart attacks, stroke and peripheral arterial diseases are developed by atherosclerotic diseases. The incidence is difficult to measure accurately due to its asymptomatic condition. Over 370,000 death occurs annually due to coronary heart disease in the modernized society. Men over 45 years are more predominant to develop plague rupture and it contributes 75% of myocardial infarctions[1]. 90% cardiovascular disease related death can be prevented by lifestyle changes.

In India Cardiovascular diseases (CVD) are leading cause for the death. One fourth of deaths are due to CVD. More than 80% of CVD death occurs due to Ischemic heart disease and stroke. As per The Global Burden of Disease estimation the age standardized CVD deaths in India are 272/100 000 population which is comparatively higher than the global burden of 235/ 100 000 population. Premature mortality rate in India increased by 59%, from 23.2 million (1990) to 37 million (2010). Constant raise in epidemic suggests the development of new strategies includes evidence based practices, reinforcement of health system, emphasis of health awareness, early detection, treatment with newer technologies and innovations which may reduce and prevent the disease burden.

Lori Mosca et.l conducted a study on Awareness, Perception, and Knowledge of Heart Disease Risk and Prevention Among Women in the United States the result shows that the Women aged 25 to 44 years were not well informed about their heart disease and stroke by their physicians. Among them, 90% are like to discuss about their heart disease or risk reduction with their physicians however 70% of them are not discussing about their problems[4].

II.   MATERIALS AND METHODS

A descriptive study was conducted to evaluate the knowledge of younger adults on prevention of atherosclerosis in outpatient department, Baptist hospital, Bangalore. Hundred voluntaries are enrolled to the study and prior consent was taken. Knowledge was assessed with structured questionnaire by interview. The data was collected and entered in Microsoft Excel v.2013 and it was analyzed using Epi Info 7.

III.   RESULTS

The analyzed data was tabulated, interpreted and presented as follow:

S.No	Variable	Percentage (%)
1	**Gender**	
	Male	47
	Female	53
2	**Dietary Pattern**	
	Vegetarian	10
	Non – vegetarian	90
3	**Educational qualification**	
	Primary	11
	Secondary	17
	Diploma	31
	Graduate	34
	Post graduate	7
4	**Religion**	
	Hindu	71
	Muslim	11
	Christian	16
	Sikh	2

Table 1:- Demographic Profile of young adults (N = 100)

The above table shows that 53.0% were males and 47.0% were females, 34.0% are graduates, 90% were non-vegetarians and 71% were Hindu's.
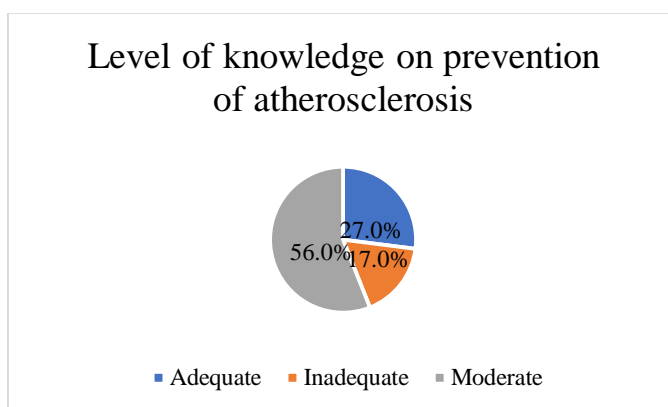

Fig 1:- Level of knowledge on prevention of atherosclerosis among young adults

Above figure shows that 56.0% of the had moderate knowledge, 27.0% of them had adequate knowledge and 17.0% of them had inadequate knowledge.

S.No	Demographic variable	Level of knowledge			Chi-square	p-Value
		Adequate	Moderate	Inadequate		
1	**Educational qualification**					
	Schooling	8	12	8	4.29	0.116
	Higher degree	19	44	9		
2	**Gender**					
	Male	12	28	13	4.76	0.092
	Female	15	28	4		

Table 2:- Association between level of knowledge with selected demographic variables

The above table shows that the chi-square value of χ^2 = 4.29 (p=0.116) between Educational status and level of knowledge and χ^2 = 4.76 (p=0.092) between gender and level of knowledge shows, there is no statistically significant associations.

Fig 2:- Correlation between age and knowledge on prevention of atherosclerosis among young adults

The Pearson correlation between age and knowledge r = 0.08 (p=0.434) shows the positive negligible correlation with no statistical significance.

Fig 3:- Correlation between monthly income and knowledge on prevention of atherosclerosis among young adults

The Pearson correlation between monthly income and knowledge r = -0.05 (p=0.632) shows the negative negligible correlation with no statistical significance.

IV. CONCLUSION

This study concludes that the knowledge on prevention of atherosclerosis among young adults are moderate and there is no relationship was observed with knowledge and educational status, gender, age and income. This result may suggest to have awareness programme on prevention of atherosclerosis among young adults to improve their lifestyle by enhancing the knowledge.

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[7]. Okunrintemi V, Valero-Elizondo J, Patrick B, Salami J, Tibuakuu M, Ahmad S et al. Gender Differences in Patient-Reported Outcomes Among Adults With Atherosclerotic Cardiovascular Disease. Journa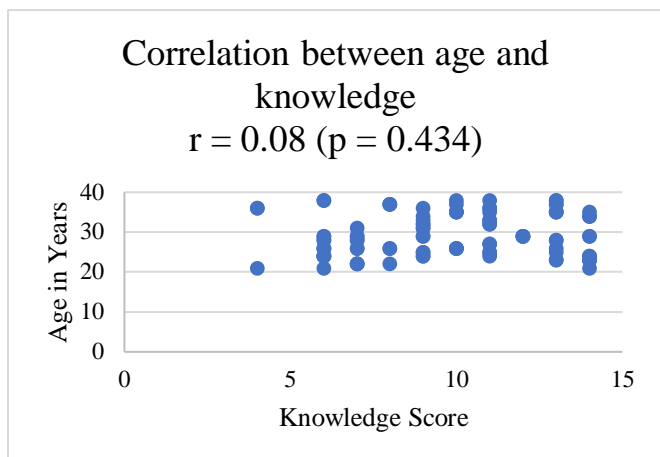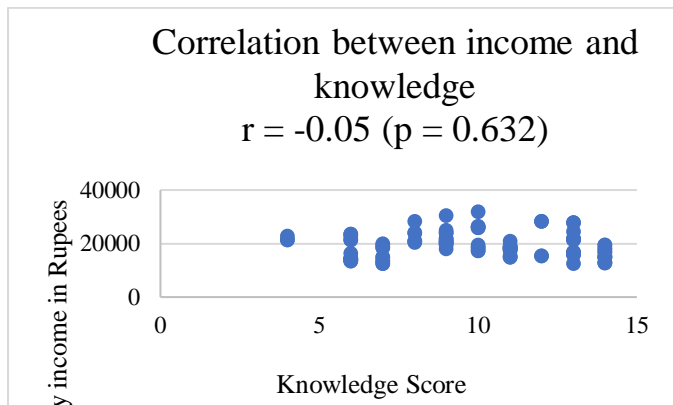l of the American Heart Association. 2018;7(24).