

## ASSESS THE KNOWLEDGE REGARDING PREVENTION OF CARDIOVASCULAR RISK FACTORS AMONG YOUNG ADULTS AT SELECTED COLLEGES OF BANGALORE, KARNATAKA WITH A VIEW TO DEVELOP SELF-INSTRUCTIONAL MODULE

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### ABSTRACT

Cardiovascular disease is now considered as an emerging public health problem with epidemiological transition characterized by changing lifestyles and a problem related to interplay of factors with regards to their existence, casualty and attributes. With this regard, the investigator had taken up “A descriptive study was conducted to assess the knowledge regarding prevention of cardiovascular risk factors among young adults at selected colleges of Bangalore, Karnataka with a view to develop self-instructional module.” **objectives:**1.To assess the knowledge regarding prevention of cardiovascular risk factor among young adults. 2. To find out the association between knowledge level and selected demographic variables among young adults. 3. To develop the self-instructional module. **Methods:** A structured knowledge questionnaire was developed to assess the knowledge regarding prevention of cardiovascular risk factors among young adults. The study was conducted in selected Degree College of Bangalore.100 young adults were selected through simple random sampling techniques by using random table number method and tool was administered. The data was analyzed by using descriptive and inferential statistics. **Results:** The analysis of the study results revealed that the 36 percent of sample had inadequate knowledge & only 6 percent have adequate knowledge. The knowledge score was in the range of 23-83 with the mean of 55.46, standard deviation of 12.931 and the median score was 56.00.Chi square and fishers’ exact probability test were used to find out the association between knowledge score and selected demographic variables of young adults which shows that there was a significant association between knowledge level among young adults and few selected demographic variables.

**Keywords:** Knowledge, young adults, cardiovascular risk factors, self-instructional module

### Introduction

Cardiovascular diseases (CVDs) are a bunch of disorders of the heart and blood vessels. They include: coronary heart disease – a disease of the blood vessels supplying the heart muscle.The worldwide Burden of Disease study estimate of age-standardized CVD death rate of 272 per 100 000 population in India is over the world average of 235 per 100 000 population. Some aspects of the CVD epidemic in India are particular causes of concern which includes its accelerated build-up, the first age of disease onset within the population, and also the high case death rate. According to WHO, Cardiovascular diseases are the most leading cause of death globally. An estimated 17.9 million people died from CVDs in 2019, representing 32% of all global deaths. Out of these deaths, 85% of people died due to heart attack and stroke.The most important behavioural risk factors of cardiovascular disease are unhealthy diet, physical inactivity, tobacco use and harmful use of alcohol which results as hypertension, hyperglycemia,

hypercholesterolemia, overweight and obesity. These “intermediate risks factors” indicate an increased risk of heart attack, stroke, heart failure and other complications. Health education on young adults is most important to reduce those intermediate risk factors and to prevent cardiovascular diseases.

### Materials & Methods

The research approach adopted for the study was quantitative approach and the design was descriptive research. The study was done in NMKRV Degree College for women Bangalore with the sample of 100 students selected through Simple Random sampling technique using table of random numbers.

The tool consists of Demographic data and structured knowledge questionnaire which is used to assess knowledge regarding prevention of cardiovascular risk factors. The questionnaire consisted of 30 questions on different areas. The Reliability Score was 0.87.

**ANALYSIS OF DATA:**

**Descriptive Statistics**

1. Frequency and percentage distribution is used to distribute the demographic variables of young adults.
2. Mean and standard deviation is used to assess the knowledge of the young adults regarding prevention of cardiovascular risk factors.

**Inferential Statistics**

1. Chi square test and fishers’ exact probability test was used to associate the knowledge level of young adults and the selected demographic variables.

**Table - 1:** Assessment of the knowledge level regarding prevention of cardiovascular risk factors among young adults in terms of frequency and percentage N=100

Level of Knowledge	Respondents	
	Frequency(f)	Percentage (%)
Inadequate	06	06.0
Moderate	72	72.0
Adequate	22	22.0

Among sample of 100 young adults in selected colleges at Bangalore majority, 58 (58.3%) have moderately adequate knowledge level regarding prevention of cardiovascular risk factors followed by 36 (36.1%) have inadequate knowledge level and remaining 6 (5.6%) have adequate knowledge.

**Table - 2:** Association between knowledge level and selected demographic variables among young adults. N=100

Sl. No	Demographic Variables	Responses	Total Knowledge score		Chi-square values	Chi-square table value
			Above median	Below median		
1.	Age in yrs.	16-20	54	36	1.484, df=1, NS	3.84 P> 0.05
		21-25	8	10		
2.	Religion	Hindu	52	41	0.611, df=1, NS	3.84 P> 0.05
		Muslim/ Christian/ others	10	5		
3.	Type of family	Nuclear	44	37	1.262, df=1, NS	3.84 P> 0.05
		Joint/ Extended	18	9		
4.	Stream of study	Arts	18	17	<b>12.706, df=2, S</b>	<b>5.99</b> <b>P&lt; 0.05</b>
		Science	15	22		
		Commerce/ Others	29	7		
5.	Dietary pattern	Vegetarian	13	22	<b>8.699, df=2, S</b>	<b>5.99</b> <b>P&lt; 0.05</b>
		Non-vegetarian	14	7		
		Mixed	35	17		
6.	Consuming outside food	Daily	8	4	1.273, df=3, NS	7.82 P> 0.05
		Once a week	14	9		
		Twice a week	16	16		
		Occasionally	24	17		

7.	Perform exercise daily	Yes	20	16	0.076, df=1	3.84
		No	42	30	NS	P> 0.05
8.	Time spends (hrs) on electronic gadget	1	7	5	3.811, df=3 NS	7.82 P> 0.05
		1-2	24	10		
		3	12	12		
		>3	19	19		
9.	Bad habits	Yes	2	3	Fisher's exact probability = 0.649	
		No	60	43		
10.	Personal history of illness	Yes	6	10	<b>3.944, df=1, S</b>	<b>3.84 P&lt; 0.05</b>
		No	56	36		
11.	Family history of chronic illness	Yes	12	10	0.093, df=1, NS	3.84 P> 0.05
		No	50	36		
12.	Family history of CVD	Yes	3	8	<b>4.549, df=1, S</b>	<b>3.84 P&lt; 0.05</b>
		No	59	38		
13.	Previous knowledge regarding CVD	Yes	27	33	<b>8.501, df=1, S</b>	<b>3.84 P&lt; 0.05</b>

Significant at 0.05 level

The knowledge score was significantly associated with stream of study (12.706, df=2), dietary pattern (8.699, df=2), personal history of illness (3.944, df=1), family history of CVD (4.549, df=1), and previous knowledge regarding CVD (8.501, df=1)

### Recommendations:

Based on the findings of the study the following recommendations have been made for further study.

- A similar study can be done on a larger sample to validate and generalize the findings.
- A comparative study can be conducted on knowledge and risk factors of cardiovascular disease among cardiac patients in selected hospital Bangalore.
- A comparative study can be carried out to assess the cardiovascular risk factors leading to the development of CVD among rural and urban population.
- A pre-experimental study can be conducted to assess the effectiveness of self-instructional module among young adults at selected colleges Bangalore.
- A similar study can be conducted by using VATP for educating the patients and care givers and factories, transports as well as general local people to be away and safe from heart disease in future.

### Limitations:

- Difficulties were faced to get cooperation from young adults to participate in the study due to their examination schedule.

- No standardized tools were available therefore the researcher prepared a tool herself for the purpose of the study.
- The questionnaire with multiple choices must have prompted the young adults to self-control. Hence, the possibility of getting average or good score could be a chance factor in this study.
- The study was confined to small number of participants and shorter period.

### Conclusion

In conclusion, the study findings had supported the need of education for young adults regarding the prevention of cardiovascular risk factors. The study concluded that majority 63 (58.3%) of the young adults have moderately adequate knowledge level followed by 39 (36.1%) have inadequate knowledge and remaining 6 (5.6%) have adequate knowledge regarding prevention of cardiovascular risk factors. Hence the awareness programme regarding prevention of cardiovascular risk factors will help to reduce theburden of the cardiovascular disease.

### Conflict Of Interest:

The authors declare that they have no conflict of interest.

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