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A study to assess knowledge regarding lifestyle modification for prevention of myocardial infraction among peoples residing in selected community area, Indore

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Abstract
The current study has been undertaken to assess knowledge score regarding lifestyle modification for prevention of myocardial infraction among peoples in Indore. The research design used for study was descriptive in nature. The tool for study was self-structured questionnaire which consists of 3 parts- PART- I consisted questions related to Socio-demographic data, PART-II Checklist for practice and PART-II consisted of self -structured knowledge questionnaire to assess knowledge score regarding lifestyle modification for prevention of myocardial infraction among peoples. The data was analyzed by using descriptive & inferential statistical methods. The self-structured knowledge questionnaires consisted of 20 questions. For maximum 1 mark was given, the score was further graded as poor (0-5), average (6-10), good (11-15) and excellent (16-20) In assessment stage, 11 (18.3%) peoples were having poor knowledge score while 49 (81.7%) were having average knowledge score, each 0 (0.0%) peoples were having good and excellent knowledge score.

Keywords: knowledge, practice, lifestyle modification for prevention of myocardial infraction

Introduction
Coronary heart disease (CHD) represents the leading cause of death in adults in the western world.1,2 Myocardial infarction (MI) is the lethal manifestation of CHD and can present as sudden death. Although MI mainly occurs in patients older than 45, young men or women can suffer MI. Fortunately, its incidence is not common in patients younger than 45 years.3 However, the disease carries a significant morbidity, psychological effects, and financial constraints for the person and the family when it occurs at a young age. The protection offered by young age has been slowly taken away by the increased prevalence of risk factors for CHD in adolescents such as smoking, obesity, and lack of physical activity. Better prognosis among young adults is achieved when the appropriate investigations and treatment are offered. Our interest in young adults with MI has been triggered by a series of patients presented with acute MI in their 20s and 30s after cocaine intake during Christmas and New Year period. Acute myocardial infarction (AMI) is a common and potentially fatal presentation of cardiovascular disease (CVD). In the United States, an estimated 605 000 incident AMIs and 200 000 recurrent AMIs occur each year.

Objective of the study
1. To assess the knowledge score regarding lifestyle modification for prevention of myocardial infraction among peoples.
2. To find out the association between knowledge score regarding lifestyle modification for prevention of myocardial infraction among peoples with their selected demographic variables.

Hypotheses
1. **H0:** There will be no significant association between knowledge score regarding lifestyle modification for prevention of myocardial infraction among peoples with their selected demographic variables
2. **H1:** There will be a significant association between knowledge score regarding lifestyle modification for prevention of myocardial infraction among peoples with their selected demographic variables.

Assumption
1. Peoples may have deficit knowledge regarding lifestyle modification for prevention of myocardial infraction.

Methodology
An evaluative approach was used and descriptive research design was used for the study. The samples consisted of 60 peoples selected by Non probability convenient sampling technique. The setting for the study was Mangliya village, Indore. Data was gathered with help of demographic variables, check list & administering a self-structured knowledge questionnaire. Data were analysis using descriptive & inferential statistics.

Analysis and interpretation
1. Section- A Frequency and percentage distribution of selected samples.
The present section comprises of selected demographic variables with their tabular and graphic representation which involves the interpretation of data in term of frequency and percentage distribution. The present section also concerned with data pertaining to the baseline information such as age, sex, educational status, economical level of peoples.

Table 1: Frequency and percentage distribution of peoples according to age

S. No.	Demographic Variable	No.	Percentage
1.	**Age**		
	a. 20-30 years	0	0.0
	b. 31-40 years	2	3.3
	c. 41-50 years	36	60.0
	d. Above 51 years	22	36.7

There were 0 (0.0%) peoples in the age group 20-30 years, 2 (3.3%) people were in the age group 31-40 years, 36 (60.0%) peoples were in the age group 41-50 years, while 22 (36.7%) peoples were in the age group above 51 years.

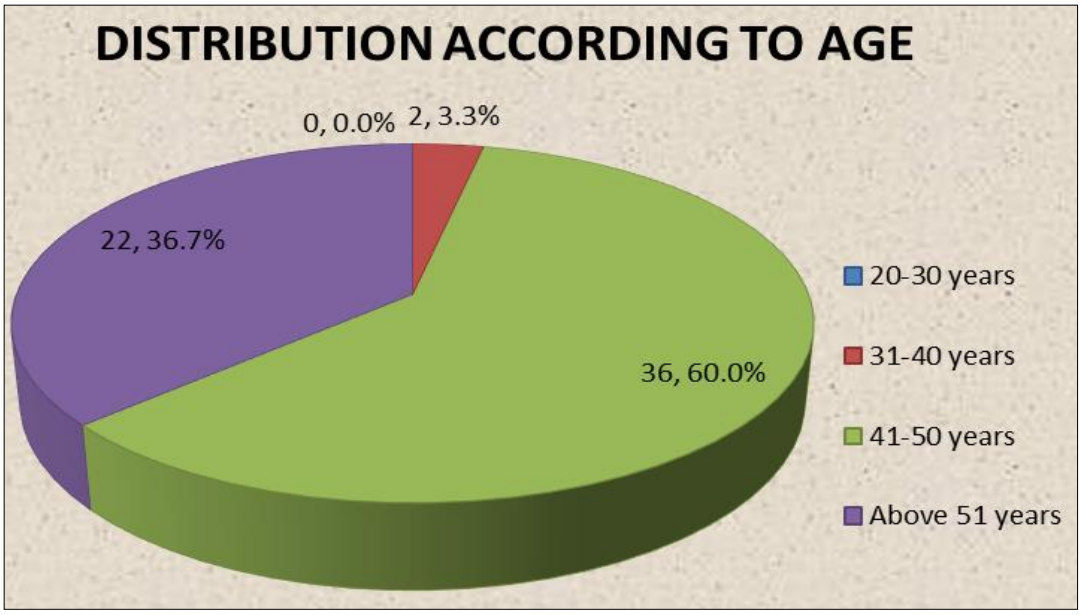

Fig 1: Pie diagram showing distribution according to age

Table 2: Frequency and percentage distribution of peoples according to sex

S. No.	Demographic Variable	No.	Percentage
2.	Sex		
	Male	34	56.7
	Female	26	43.3

There were 34 (56.7%) peoples were male and 26 (43.3%) peoples were female in the present study.

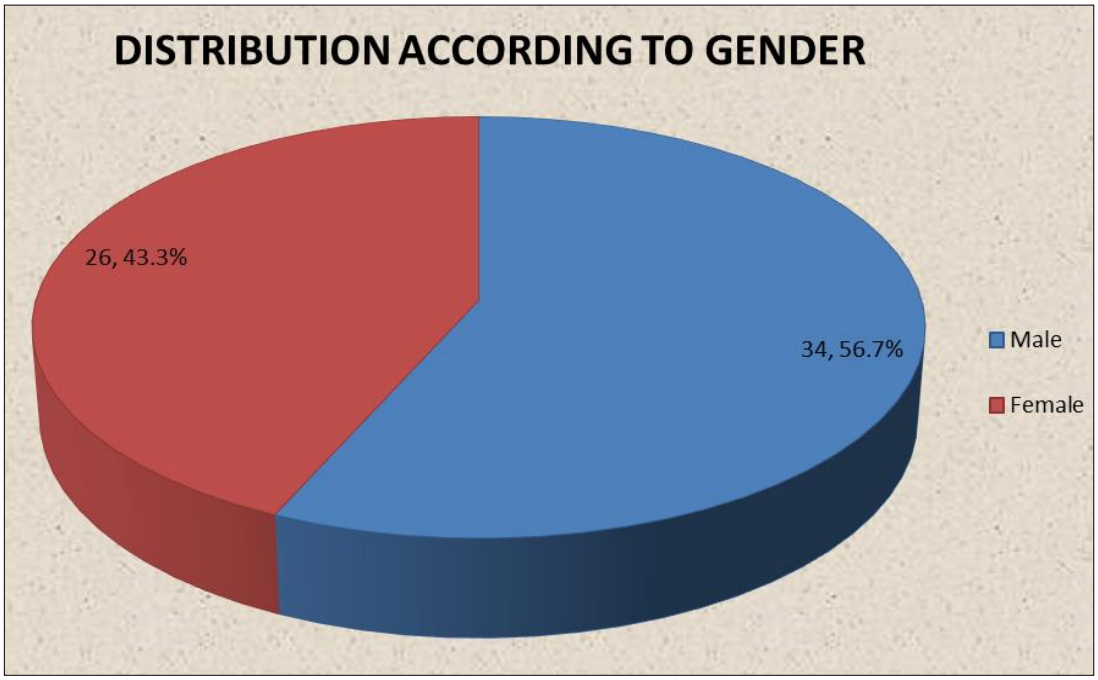

Fig 2: Pie diagram showing distribution according to sex

Table 3: Frequency and percentage distribution of peoples according to educational status.

S. No.	Demographic Variable	No.	Percentage
3.	Educational status		
	a. Illiterate	26	43.3
	b. Primary	4	6.7
	c. Higher secondary passed	10	16.7
	d. Graduation	20	33.3

In this study peoples of 26 (43.3%) adolescent found to be illiterate, 4 (6.7%) adolescents had primary level of education, 10 (16.7%) peoples had higher level of education, while 20 (33.3%) peoples found to be graduate.

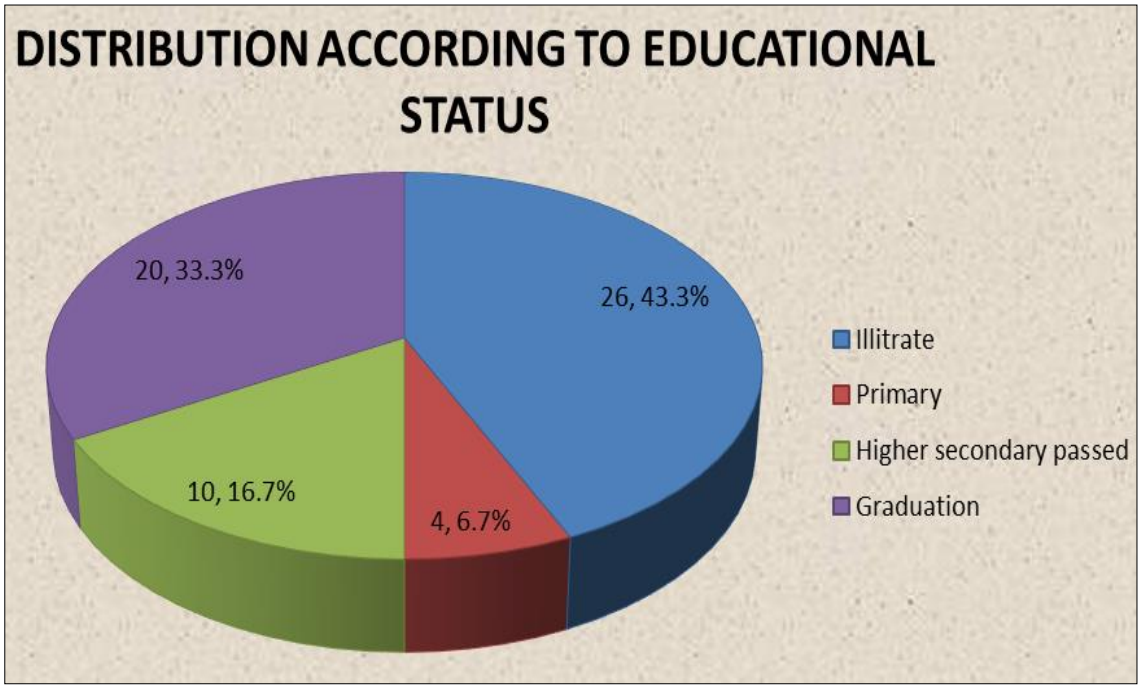

Fig 3: Pie diagram showing distribution according to educational status.

Table 4: Frequency and percentage distribution of peoples according to economical level.

S. No.	Demographic Variable	No.	Percentage
4.	Economical level		
	a. Less than 5000/-	0	0.0
	b. 5001/- to 10000/-	30	50.0
	c. 10001/- to 15000/-	20	33.3
	d. Above 15001/-	10	16.7

In this study economical level of 0 (0.0%) peoples found to be less than 5000/-, 30 (50.0%) peoples of had 5000/- to 10000/- level of economic, 20 (33.3%) peoples of had 10001/- to 15000/- level of economic, while 10 (16.7%) peoples of had more than 15001/- level of economic.

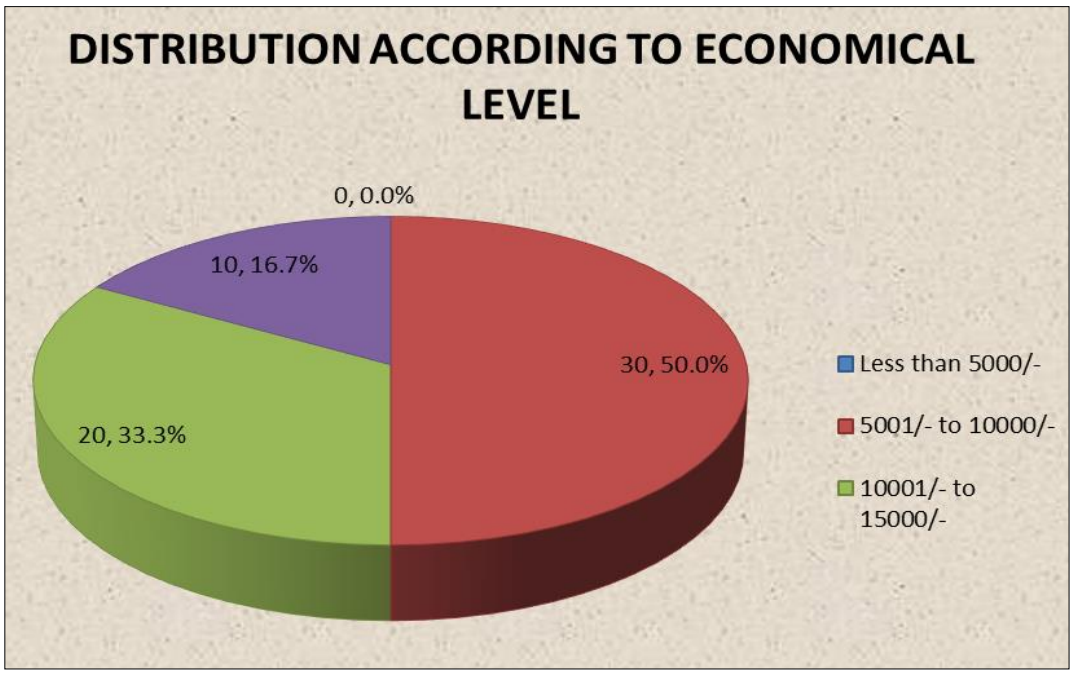

Fig 4: Pie diagram showing distribution according to economical level.

2. Section- B knowledge score among the peoples

Table 5: Knowledge score grades

S. No.	Knowledge score grades	At Assessment stage	
		No.	%
1.	Poor (0-5)	11	18.3
2.	Average (6-10)	49	81.7
3.	Good (11-15)	0	0.0
4	Excellent (16-20)	0	0.0
	Total	60	100.0

The above table shows the knowledge score of peoples. The self-structured knowledge questionnaires consisted of 20 questions. For maximum 1 mark was given, the score was further graded as poor (0-5), average (6-10), good (11-15) and excellent (16-20) In assessment stage, 11 (18.3%) peoples were having poor knowledge score while 49 (81.7%) were having average knowledge score, each 0 (0.0%) peoples were having good and excellent knowledge score. Thus, the intervention will helpful in reducing the anxiety level of the peoples.

3. Section- B knowledge score among the peoples.

Table 6: knowledge score

S. No.	Score	Mean ± SD
1.	Knowledge score	7.10 ± 2.40

The above table shows the knowledge score regarding lifestyle modification for prevention of myocardial infraction among peoples. The knowledge score was 7.10 ± 2.40, while the practice score was 7.40 ± 2.29.

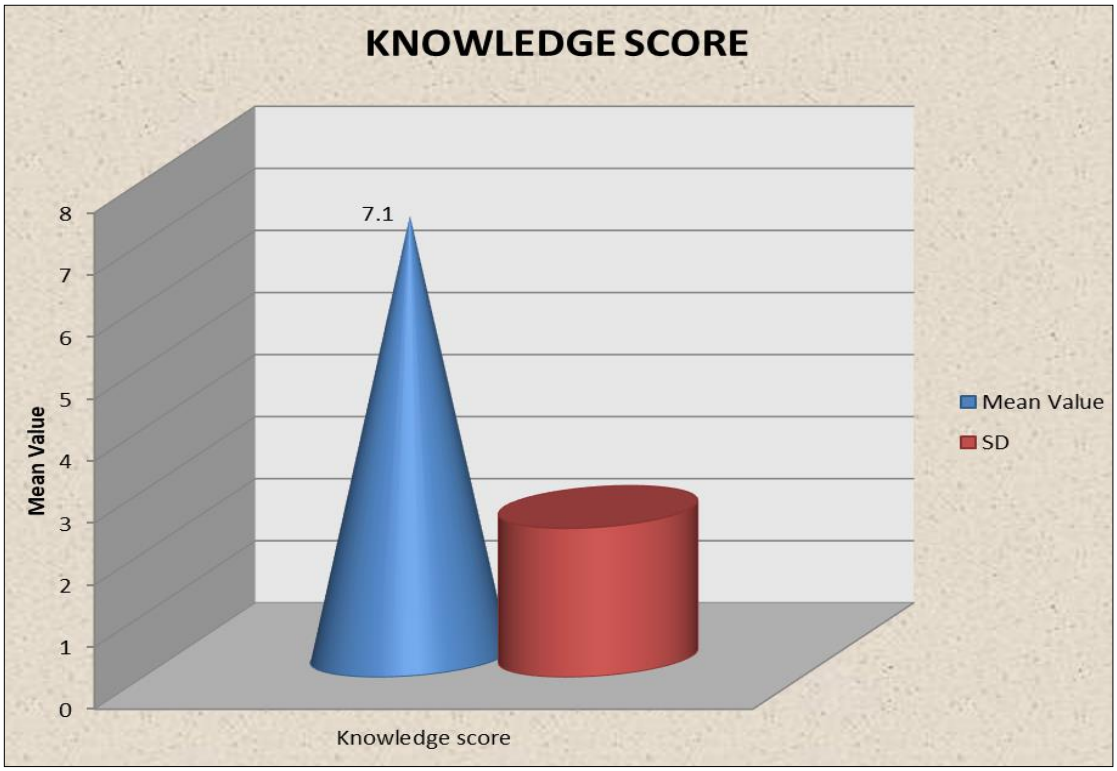

Fig 1: Bar diagram showing knowledge score among peoples

4. Section- D Association between knowledge score among the peoples with their selected demographic variables.

Table 7: Association of age with pre-test scores

Age	Test scores			Total
(In years)	Poor (0-5)	Average (6-10)	GOOD (11-15)	
21-30	0	0	0	0
31-40	0	2	0	2
41-50	6	30	0	36
≥51	5	17	0	22
Total	11	49	0	60
X=0.79 p>0.05(Insignificant)				

The association of age test scores is shown in present table 3.1. The probability value for Chi-Square test is 0.79 for 2 degrees of freedom which indicated a insignificant valve (p>0.05). Hence, it is identified that there is a insignificant association between age and test scores. Moreover, it is reflected that age isn't influenced with the present problem.

Table 8: Association of sex with pre-test scores

Sex	Test scores			Total
	POOR (0-5)	AVERAGE (6-10)	GOOD (11-15)	
Male	5	29	0	0
Female	6	20	0	2
Total	11	49	0	60
X=0.69 p>0.05(Insignificant)				

The association of sex and test scores is shown in present table 3.1. The probability value for Chi-Square test is 0.69 for 1 degrees of freedom which indicated a insignificant valve (p>0.05). Hence, it is identified that there is a insignificant association between sex and test scores. Moreover, it is reflected that sex isn't influenced with the present problem.

Table 9: Association of educational status with pre-test scores

Educational status	Test scores			Total
	POOR (0-5)	AVERAGE (6-10)	GOOD (11-15)	
Illiterate	6	20	0	26
Primary	1	3	0	4
Higher secondary	2	8	0	10
Graduation	2	18	0	20
Total	11	49	0	60
X=1.45 p>0.05(Insignificant)				

The association of educational status and test scores is shown in present table 3.1. The probability value for Chi-Square test is 1.45 for 3 degrees of freedom which indicated a insignificant valve (p>0.05). Hence, it is identified that there is a insignificant association between educational status and test scores. Moreover, it is reflected that educational status isn't influenced with the present problem.

Table 10: Association of economical level with pre-test scores

Economical level	Test scores			Total
	POOR (0-5)	AVERAGE (6-10)	GOOD (11-15)	
>5000/-	0	0	0	**0**
5001-10000/-	5	25	0	30
10001-15000/-	3	17	0	20
Above 15001/-	3	7	0	10
Total	11	49	0	60
X=1.11 p>0.05(Insignificant)				

The association of economical level and test scores is shown in present table 3.1. The probability value for Chi-Square test is 1.11 for 2 degrees of freedom which indicated a insignificant valve (p>0.05). Hence, it is identified that there is a insignificant association between economical level and test scores. Moreover, it is reflected that economical level isn't influenced with the present problem.

Results

In assessment stage, 11 (18.3%) peoples were having poor knowledge score while 49 (81.7%) were having average knowledge score, each 0 (0.0%) peoples were having good and excellent knowledge score. Thus, the intervention will helpful in reducing the anxiety level of the peoples. The knowledge score was 7.10 ± 2.40, while the practice score was 7.40 ± 2.29.

Conclusion

Thus, after the analysis and interpretation of data we can conclude that the hypothesis RH_0 that, there will be no significant association between knowledge score among peoples with their selected demographic variables at (P<0.001) is being accepted.

Furthermore, Thus, peoples having average knowledge score regarding lifestyle modification for prevention of myocardial infraction so there is need to improve knowledge of peoples residing in selected community area.

Limitations

- This was limited to Mangliya, Indore.
- This was limited to 60 peoples.

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