

2. Literature Survey

1.M Sadeghi MD, H.Ruhafza et al 2006, conducted study on the prevalence of CAD. Cross sectional study 6498 people aged above 35 yrs, multistage cluster sampling was conducted in the provincial cities of Isfahan. 3338 women and 3160 men participated in the study. The prevalence of CAD based on the Rose questionnaire and Minnesota coding was 37.5% in women and 22.2% in men. The prevalence of definite possible MI based on ECG was higher in men, however a higher prevalence of possible and definite ischemia was found in women.

2. Rosanne Crouch 2008 conducted a descriptive study on perception knowledge and awareness of coronary artery disease among rural Australian women 25 to 65 yrs of age. The study included sixty five women participants. Only 13% (n = 8) of participants identified heart disease as the most significant health problem for women sixty four percent of women participating in the study reported that breast cancer claims more lives than heart disease. Life style modifications can substantially affect morbidity and mortality from CAD.

3. Dariush Mozaffarian, Renata Micha, Sarah Wallace 2009 conducted study on coronary Heart Disease of increasing poly unsaturated fat in place of saturated fat. A systematic review and meta analysis of randomised controlled trials. In study investigate included population characteristics, control and intervention diets, follow up duration, types of events, risk ratio and SEs pooled effects were calculated using inverse variance weighted random effects meta analysis from 346 identified abstract, eight trials met inclusion criteria totalling 13,614 participants with 1,042 CHD events. Average weighted PUFA consumption was 14.9% energy (range 8.0% - 22.7%) in intervention groups versus 5.0% energy (range 4.0% - 6.4%) in control. The overall pooled risk reduction was 19% (RR = 0.81, 95% confidence interval [CI] 0.70-0.95, P=0.008) corresponding to 10% reduced CHD risk (RR = 0.90, 95% CI = 0.83-0.97) for each 5% energy of increased PUFA without evidence for statistical heterogeneity (Q statistic P = 0.13, I² = 37%). Meta regression identified study duration as an independent determinant of risk reduction P = 0.017 with studies of longer duration showing greater benefits. These findings provide evidence that consuming PUFA in place of SFA reduces CHD events in RCTs. This suggests that rather than trying to lower PUFA consumption a shift towards greater population PUFA consumption in place of SFA would significantly reduce rate of CHD.

Objectives of the Study

- 1) To assess the knowledge of adults of kale village regarding prevention of coronary artery disease before the administration of structured teaching programme.
- 2) To evaluate the effectiveness of structured teaching programme regarding prevention of coronary artery disease in the adults of kale village, Karad.
- 3) To find the association the post test knowledge score of adults with selected socio demographic data.

3. Materials and Methods

The investigator carried out the study in 30 subjects from Kale rural population by using interview schedule method. The study was conducted in year 2012 in month of October. Purposive sampling technique was used. Institutional ethics Committee approval and informed consent from the subjects were taken before the study. The tool consisted of structured questionnaire. The structured questionnaire was constructed by the investigator to assess the knowledge oral health hazards. SECTION I: Socio demographic data. (Total items were 11) SECTION II: Questionnaire on personal history regarding health habits & other history (Total items were 20) The STP was titled "prevention of coronary artery disease" calculated paired 't' value (t=14.687) is greater hence H1 is to be accepted. This indicates that the gain in knowledge score is statistically significant P value < 0.0001 levels. There for the structured teaching programme on Prevention of CAD is effective in improving the knowledge of adults.

4. Results

Table 1 Frequency and percentage distribution of adult according to demographic variable. N=30

Sr. No	Demographic variable	Frequency	%
1	Age		
	31-40 years	13	43.3
	41- 50 years	17	56.6
	51- 60 years	-	-
2	Gender		
	Female	25	83.3
	Male	5	16.6
3	Education		
	Illiterate	8	26.6
	Primary	11	37
	Secondary	7	23.3
4	Occupation		
	House Wife	21	70
	Employed	1	3.3
	Farmer	7	23.3
	Self employed	1	3.3
5	Family		
	Nuclear	23	76.6
6	Religion		
	Hindu	21	70
	Muslim	7	23.3
	Baudh	1	3.3
	Others	1	3.3
7	Diet		
	Vegetarian	7	23.3
	Non Vegetarian	1	3.3
8	Income		
	Less than Rs. 2000	13	43.3
	Rs. 2001-3000	9	30
	Rs. 3001-4000	7	23.3
	Rs. 5000 and Above	1	3.3

The data presented in table 1 indicates that in 17 (56.6%) belongs to 41- 50 yrs of age. Majority adults 25 (83.3%) females. Majority adults 11 (37%) were educated up to primary education and 4 (13.3%) were post graduate.

Maximum number that 23 (76.6 %) from nuclear 7 (23.3 %) from joint family . Majority adults 21 (70%) were house wife and 1 (3.3%) were doing job. Maximum adults 21 (70%) are belongs to Hindu religion 1 (3.3%) were belongs to other religion . Maximum adults 22 (73.3%) are consuming mixed type of diet and 1 (3.3%) are having non-vegetarian diets . Maximum ADULTS 13(43.3%) having monthly incom Rs. 2000 and less and 1 (3.3%) were Rs. 4001 – 5000 more.

Table 2: Frequency and percentage distribution of adult according to habit variable.N=30

Sr. No	Habit variable	Frequency	%
1	Disease condition		
	Heart Attack	5	16.6
	Diabetic Mellitus	-	-
	Cancer	-	-
	No any other disease	25	83.3
2	Sigaret smoking		
	Every Day	-	-
	Very ofenly	-	-
	Alternet day	-	-
	No	30	100
3	Alcoholic		
	Every Day	-	-
	Very ofenly	-	-
	Alternet day	-	-
	No	30	100
4	Tobacco Chewing		
	Every Day	16	53.3
	Very ofenly	-	-
	Alternet day	-	-
	No	14	46.6

Table 3: Area wise frequency and percentage distribution of pre test level of knowledge on prevention of coronary artery disease, = 30

Knowledge area on prevention of CAD	Good		Average		Poor	
	F	%	F	%	F	%
	6	20	20	66.67	4	13.33

Out of 30 samples of adults in order to assess the knowledge of prevention of coronary artery disease 6 (20%) are having good knowledge, 20 (66.67%) of the subject are having average knowledge, 4(13.33%) of the subject having poor knowledge.

Table 4: Area wise frequency and percentage distribution of post test level of knowledge on prevention of coronary artery disease N= 30

Knowledge area on prevention of CAD	Good		Average		Poor	
	F	%	F	%	F	%
	7	23.33	20	66.67	3	10

Data in table 4 indicates that Out of 30 samples of adults in order to assess the post test level knowledge of prevention of coronary artery disease 7 (23.33%) are having good knowledge, 20 (66.67%) of the subject are having average knowledge, 3 (10 %) of the subject having poor knowledge .

Table 5 Mean, Median, standard deviation of knowledge of adults on prevention of CAD. N=30

Sr. No	Parameters	Pre test	Post test	Difference
1	Mean	7.57	14	6.43
2	Median	7	14	7
3	Standard deviation	2.16	1.91	0.25

Table 6: Data showing difference between pre test and post test mean and t values of knowledge score.

Sr. No		Mean	SD	t Value	p Value	Inference
1	Pre test	7.57	2.16	14.687	<0.0001	HS
2	Post test	14	1.91			

HS= Highly Significant

Table 6 reveals that the calculated paired 't' value (t=14.687) is greater hence H1 is to be accepted. This indicates that the gain in knowledge score is statistically significant P value < 0.0001 levels. There for the structured teaching programme on Prevention of CAD is effective in improving the knowledge of adults

Table 7: Association between post score knowledge and selected demographic variables of coronary artery disease

Post test knowledge							
S. No	Variables	Good	Average	Poor	Chi-square	P Value	Df
1	Age in year				1.921	0.383	2
	31- 40 years	1	9	3			
	41- 50 year	2	14	1			
2	Gender				1.425	0.491	2
	Female	0	4	1			
	Male	3	19	4			
3	Occupation +				3.913	0.141	2
	House wife	3	14	4			
	Employed	0	9	0			
4	Religion *				5.311	0.07	2
	Hindu	3	17	11			
	Muslim	0	6	3			
5	Education@				5.801	0.055	2
	Below secondary	0	16	3			
	Above Secondary	3	7	1			
6	Diet #				2.779	0.249	2
	Vegetarian	0	7	0			
	Mixed	3	16	4			

Key:-+ : Indicate that occupation House wife and employed has compiled and farming and business has compiled for analysis purpose.

*Indicates religion Muslim, Boudh and other has compiled for analysis purpose.

@ Indicates Primary and secondary complied in to below secondary and higher secondary graduation and post graduation complied in to above secondary for analysis purpose.

Indicates that diet vegetarian and non vegetarian has compiled for analysis purpose.

The findings in tables 7 reveals that there was no statistical significant association between post test knowledge and socio demographic variables so H0 is accepted.

5. Discussion

There were no contradictory /similar results are found to support the study. William B. Kannel, MD shown their findings recommended guidelines of blood pressure, total cholesterol, and LDL cholesterol effectively predict CHD risk in a middle-aged while population sample. A simple coronary disease prediction algorithm was developed using categorical variables, which allows physicians to predict multivariate CHD risk in patients without overt CHD. **H.Ruhafza et al 2006**, conducted study on the prevalence of CAD. The prevalence of definite possible MI based on ECG was higher in men, however a higher prevalence of possible and definite ischemia was found in women.

6. Conclusion

The mean post –test knowledge score was found to be significantly higher than the pre test score. Post test showed significant improvement in the level of knowledge on prevention of CAD. Thus it be calculated that STP is an effective method of teaching in adults to improve the knowledge regarding CAD.

7. Future Scope

Nursing Practice: Since the present study showed that most of the adults had average knowledge on prevention of CAD , this present study will enable them to become aware about prevention of CAD and cure the disease in the society . so the nurses can take help from the study and practice health education using STP.

Nursing Administration: This study emphasizes the need for health education programme on prevention of CAD to improve the knowledge of adults in their day today life. The STP and tool can be used while giving health education.

Nursing Education: Nursing education has an ample opportunity to educate regarding prevention of CAD. The finding of the study and the STP can be used as reference material for student nurses.

Nursing Research: Their is a growing need for furnishing nursing research in all areas of health care. The nurses researcher especially beginner need to enhance their knowledge. The nuse researcher may effectively use the result of available studies and recommended on the importance of early identification and prevention of further illness.

References

- [1] Falk E, Shah PK, Fuster V. Coronary plaque disruption. *Circulation*2003;92:657–71.
- [2] Available at <http://www.merckmanuals.com/home/sec03/ch020/ch020b.html#sec03-ch020-ch020b>
- [3] Available at <http://heart.bmj.com/content/91/6/719>
- [4] Lakka TA, Venalainen JM, Rauramaa R, Salonen R, Tuomilehto J, Salonen JT. Relation of leisure-time physical activity and cardiorespiratory fitness to the risk

of acute myocardial infarction.N Engl J Med2004;330:1549–54

- [5] Ornish D, Brown SE, Scherwitz LW, Billings JH, Armstrong WT, Ports TA, et al. Can lifestyle changes reverse coronary heart disease? The Lifestyle Heart Trial. *Lancet* 2000;336:129–33
- [6] Frick MH, Elo O, Haapa K, Heinonen OP, Heinsalmi P, Helo P, et al. Helsinki heart study: primary-prevention trial with gemfibrozil in middle-aged men with dyslipidemia. Safety of treatment, changes in risk factors, and incidence of coronary heart disease.N Engl J Med 2007;317:1237–45.Available
- [7] Viswanathan Mohan, MD, PhD, Raj deepa, PhD, MPhil, Clinical study: coronary artery disease October 12, 2000; revised manuscript received March 19, 2001, accepted May 15, 2001.

Author Profile



Ms. More Ujwala Ramchandra is working as Clinical Instructor in Krishna Institute of Medical Sciences Deemed University Krishna Institute Of Nursing Sciences Karad Dist-Satara (Maharashtra) 415539, India

Pradnya Santosh Kadam. Lecturer, Samarth Nursing College, Dervan, Tal – Chiplun, Dist-Ratnagiri (Maharashtra)