

## TO RECORD PREVALENCE OF VARIOUS CONVENTIONAL RISK FACTORS IN 50 MYOCARDIAL INFARCTION PATIENTS AT AIMS, DEWAS.

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### Abstract

**Background & Method:** This study was conducted at Amaltas Institute of Medical Sciences, Dewas with 50 randomly selected individuals who had no symptoms/risk factor for CAD in the group relatives of pts volunteers, general pts with trivial illness like fever who agreed for study.

**Result:** 28pts had BMI >25, out of which 17 were male & 11 female. 25 pts were smoker/tobacco chewer, out of which 24 male 01 female. 13 pts were alcoholic, all were male. 14pts had family h/o of CAD, out of which 05 were male & 09 female. 20 pts had systemic HTN, out of which 8were male & 12 female. 11pts had diabetes mellitus, out of which 07 were male & 04 females. 03 pts had h/o CVA & all of them were male. 25 pts had dyslipidemia, out of which 16 were male & 09 female. Most common risk factors were, BMI (56%) >Dyslipidemia (50) >Smoking (48%). In males most common risk factors were Smoking (48%) >BMI(34%) > Dyslipidemia (32%). In females most common risk factors were systemic HTN (24%) >BMI (22%)>Dyslipidemia (18%).

**Conclusion:** Smoking/Tobacco Chewing: out of 50 MI cases, 25(50%) were devouring tobacco either through smoking or biting. Liquor abuse Addiction of liquor is getting successive step by step in our general public, because of different reasons. We found out of 50 MI cases 13(26%) were alcoholic and all were male. Foundational Hypertension out of 50 instances of Myocardial dead tissue, 20(40%) had fundamental hypertension. Diabetes mellitus: out of 50 instances of MI, 11 (22%) had diabetes mellitus. Out of which 07 were male and 04 female. Cerebrovascular mishap: Out of 50 instances of MI just 3 cases had going with CVA and all were male.

**Keywords:** myocardial infarction, prevalence & conventional.

**Study Designed:** Observational Study.

### Introduction

Regardless of higher rates of smoking, CAD rates in country India are around one-a large portion of those in metropolitan India. A cross-sectional study done in Haryana in 1998 uncovered a CAD commonness pace of 6% in country Indians matured 35-64 years[1]. This CAD rate is higher than contemporary U.S. rates and 3-overlay higher than the 2.1% detailed in 1974 from a similar town.

The prevalence of CAD in metropolitan India is about twofold the rate in provincial India and around 4-overlay higher than in the U.S. The rates seem, by all accounts, to be higher in south India with Kerala having a pervasiveness of 13% in metropolitan zones and 7% in rural territories. The CAD rates in metropolitan India are like those among the for the most part more prosperous abroad Indians. For instance, the prevalence of CAD in New Delhi is 10% and Chennai 11%. [2] Overall there has been a >3-overlay increment from 3% prevalence 30 years prior in metropolitan India[3]. In Sri Lanka, somewhere in the range of 1980 and 1988, the CAD death rates have multiplied and now have a commonness of 10%, like India. Computer aided design in India seems to follow the very example that was seen in the U.S., where high paces of

CAD initially showed up in the metropolitan and princely, trailed by poor people and provincial Americans.

Higher paces of CAD in metropolitan India contrasted with provincial India propose significant parts for dietary and ecological factors, or support. There is an essentially higher weight record (BMI) in metropolitan India contrasted with provincial India (BMI, 24 versus 20 in men and 25 versus 20 in ladies). There is likewise a higher pace of stomach heftiness among the metropolitan populace, with metropolitan men having a midsection to hip proportion (WHR) of 0.99 contrasted with 0.95 among rustic men[4]. This increment in BMI and WHR brings about huge dyslipidemia and insulin opposition and a 3-overlap increment in diabetes. The commonness of CAD hazard factors in North India among provincial and metropolitan populaces.

### Material & Method

This study was conducted at Amaltas Institute of Medical Sciences, Dewas from June 2017 to May 2018 with 50 randomly selected individuals who had no symptoms/risk factor for CAD in the group relatives of pts volunteers, general pts with trivial illness like fever who agreed for study.

All patients were evaluated for presence & duration of conventional risk factors for CAD:

1. Smoker- one who has smoked at least one cigarette per day or an equivalent or who has smoked at this level up to a time later than 3 months before the attack.
2. Non smoker: One who has never smoked tobacco at the levels indicated, various smoking habits included (bidi, chillum, hukka), Tobacco users in other form: snuff, tobacco chewer.

#### Inclusion Criteria

1. Diagnosis of myocardial infarction was made according to "WHO" criteria for definite myocardial infarction. 14
2. Typical chest pain lasting for more than 20 minutes.
3. ECG changes:

#### Exclusion Criteria:

1. Chronic renal failure patients.
2. Chronic liver disease patients
3. Pts with severe congestive heart failure

#### Results

**Table 1: Age distribution of myocardial infarction patients (n=50)**

NO	Age group	Number of patients
1	≤ 40 yrs*	13(26%)
2	41-65 yrs	31(62%)
3	>65	6(12%)
<b>Total</b>		<b>50</b>

13 cases were in the age group of ≤40 years. Majority of pts (31) were in the age group of 45-65 years. 6 patient were in the age group of >65 years.

**Table 2: showing various Risk factors in 50 cases of Myocardial Infarction:**

S. No.	RISK FACTOR	TOTAL	MALE	FEMALE
1	DIABETES MELLITUS	11(22%)	7(14%)	4(8%)
2	BMI(>25)	28(56%)	17(34%)	11(22%)
3	SMOKING/TOBACCO CHEWING	25(50%)	24(48%)	1(2%)
4	ALCOHOLISM	13(26%)	13(26%)	0
5	STRESS	4(8%)	1(2%)	3(6%)
6	SYSTEMIC HTN	20(40%)	8(16%)	12(24%)
8	FAIMILY HISTORY OF PREMATURE CAD	14(28%)	5(10%)	9(18%)
8	CVA	3(6%)	3(6%)	0
9	DYSLIPIDEMIA	25(50%)	16(32%)	9(18%)
10	TYPE A PERSONALITY	4(8%)	2(4%)	2(4%)

28pts had BMI >25, out of which 17 were male & 11 female. 25 pts were smoker/tobacco chewer, out of which 24 male 01 female. 13 pts were alcoholic, all were male. 14pts had family h/o of CAD, out of which 05 were male & 09 female. 20 pts had systemic HTN, out of which 8were male & 12 female. 11pts had diabetes mellitus, out of which 7 were male & 04 females. 03 pts had h/o CVA & all of them were male. 25 pts had dyslipidemia, out of which 16 were male & 09 female. Most common risk factors were, BMI (56%) >Dyslipidemia (50) >Smoking (48%). In males most common risk factors were Smoking (48%) >BMI(34%) > Dyslipidemia (32%). In females most common risk factors were systemic HTN (24%) >BMI (22%)>Dyslipidemia (18%).

#### Discussion

Hoo Sun Chang, Heyon Chang, Song Vogue Ahn, Nam Wook Hur[5] in The Kangwha Study assessed effect of numerous cardiovascular danger factors on the carotid intimal average thickness in youthful grown-ups. In this investigation they presumed that with an expanding number of danger factors (p value<0.001) and carotid intimal average thickness esteems were 0.665, 0.674, 0.686, 0.702 and 0.748 mm for 0,1,2,3,4,and 5 danger factors, respectively[6]. This examination shows an unfriendly effect of numerous cardiovascular danger factors on carotid intimal average thickness in asymptomatic, sound populace of youthful grown-ups.

Daniel Staub, et.al[7] assessed that The intima-media thickness (IMT) of regular carotid corridor (CCA) is very much related with the level of arteriosclerosis and is an indicator of ischemic stroke and cardiovascular dreariness and mortality. The point of the investigation was to contrast the prescient estimations of IMT and respect to cerebrovascular and cardiovascular dreariness and mortality[8].

#### Conclusion

Out of 50 MI cases, 25(50%) were devouring tobacco either through smoking or biting. Liquor abuse Addiction of liquor is getting successive step by step in our general public, because of different reasons. We found out of 50 MI cases 13(26%) were alcoholic and all were male. Foundational Hypertension out of 50 instances of Myocardial dead tissue, 20(40%) had fundamental hypertension. Out of 50 instances of MI, 11 (22%) had diabetes mellitus. Out of which 07 were male and 04 female. Cerebrovascular mishap, Out of 50 instances of MI just 3 cases had going with CVA and all were male.

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