

## **FERQUANCY OF MYOCARDIAL INFARCTION IN THE CARDIAC CARE UNIT OF HAYATABAD MEDICAL COMPLEX**

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### **Abstract:**

*Myocardial infarction (MI), commonly known as a heart attack, is a major global cause of morbidity and mortality, resulting from an imbalance between the oxygen supply and demand of the heart muscle. This study aimed to determine the frequency and risk factors associated with MI among patients admitted to Hayatabad Medical Complex, Peshawar. A descriptive cross-sectional design was employed over four months, enrolling 100 patients using a non-probability sampling technique. Data were collected via structured questionnaires and analyzed using SPSS software. Results showed that 62% of patients were male and 38% female, with the majority aged between 45–55 years. Hypertension (62%) emerged as the most common risk factor, followed by diabetes (59%), smoking (57%), and obesity (57%). Findings align with regional studies that highlight the higher prevalence of MI among males and the increasing burden of modifiable risk factors such as hypertension, diabetes, and sedentary lifestyles. The study underscores the urgent need for targeted public health interventions to address the growing incidence of myocardial infarction in Pakistan.*

**Keywords:** HMC, MI, STEMI, SOB, AMI, EDTA, TNF.

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### **Introduction**

Myocardial infarction is another name for a heart attack. A life-threatening illness the heart muscle suffers from a condition known as myocardial infarction, which is caused by an imbalance between the oxygen supply and demand of the heart muscle. Myocardial infarction is the main cause of disease and mortality worldwide. Acute ST-elevation heart attacks (STEMI) are predicted to affect more than 3.5 million individuals annually, whereas non-ST-elevation heart attacks (NSTEMI) would affect more than 4 million people

High blood pressure, advanced age, obesity and overweight, diabetes mellitus, tobacco use, high blood cholesterol and fats, inactivity, binge drinking, chronic renal disease, and high blood pressure run in the family.

The leading factor in hospital mortality is cardiogenic shock. About 10% of MI patients may get ventricular aneurysms. The most frequent side effects experienced by MI patients are cardiac arrhythmias. Atrial fibrillation, ventricular tachycardia, and ventricular fibrillation are the most common arrhythmias that MI patients may experience, followed by heart block. Patients who are diabetic and older are more likely to get MI problems.

### **Methodology** **Study Design**

Descriptive cross-sectional study.

## Study Settings

Hayatabad medical complex Peshawar MTI

## Study Duration

The duration of the study will be 4 Months.

## Sample Size and Sampling Technique

A total 100 patient offered to Hayatabad medical complex. Conventional non probability sampling techniques were used to collect data through questionnaire.

## Inclusion Criteria

- a) Patient who has myocardial infarction.
- b) Those patients who are willing to give data.

## Exclusion Criteria

- a) Those patients who have hemorrhagic stroke
- b) Those patients who presenting with last stage of advance cancer.

## Data Collection Procedure and Data Analysis Procedure

The data were be collected through written questionnaire from the attendant after taking consent. The data were be analyzed using SPSS version.

## Discussion

The prevalence of myocardial infarction is rising worldwide, particularly in South Asia. In developing nations, it has notably high morbidity and mortality rates. Pakistan, a developing nation, also has to deal with an ongoing increase in the number of people who contract this illness. The rise in risk factors, the majority of which include hypertension, dyslipidemia, diabetes, obesity, family history, smoking, and sedentary lifestyle.

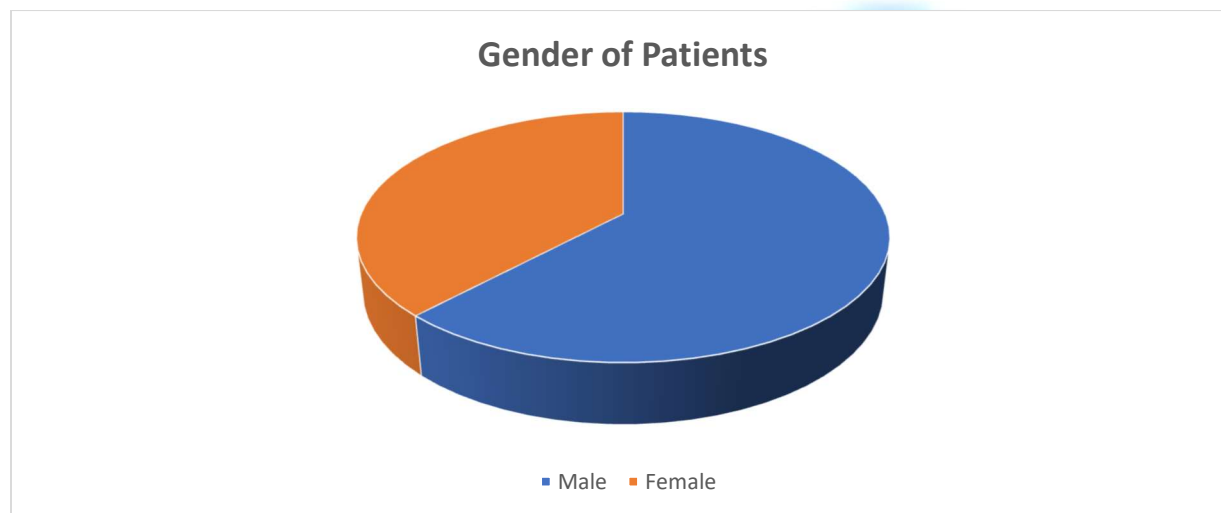
Is the cause of this rising morbidity. 38 percent of the patients in our study were female, whereas 62 percent were male. Most of the patients were between the ages of 45 and 55. 33 percent. A study on the frequency of myocardial infarctions in the Hayatabad Medical Complex in Peshawar was undertaken, and the majority of the patients were between the ages of 45 and 55. (33 percent). Likewise, 62 percent of the participants in the study were men, making them the majority.(25) Similar findings were achieved by another study carried out in Karachi. Additionally, there were 65.2 percent more men than women, with 34.8 percent of the population being female.

## Results

100 individuals were enrolled in our study, of whom 62% were men and 38% were women. Hypertension was the most prevalent risk factor (62%) and was followed by diabetes (59%) smoking (57%) and obesity (57%).

We have total 100 patients.

Gender of Patients	Number of Patients	Percentage of Patients
Male	62	62%
Female	38	38%



**Table No 2:** Patients were divided into five Groups on basis of Age

Age of Patients	Number of Patients	Percentage of Patients
25-30 Years	5	5%
36-45 Years	10	10%
45-55 Years	33	33%
56-65 Years	25	25%
66 and above 66 Years	27	27%

## Conclusion

The greatest cause of death and morbidity worldwide is myocardial infarction. South Asia notably bears a heavier percentage of the disease's burden, which is shared in large part by emerging nations. In Pakistan, both the incidence of MI and associated risk factors are rising. Hypertension, dyslipidemia, diabetes, smoking, family history, and obesity are the main risk factors for MI.

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