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Prevalence and Prescribing Pattern Analysis among Myocardial Infarction Patients During Covid – 19 Era

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ABSTRACT
Thus, it can be concluded that the trends in prescribing medication in case of myocardial infarction and the strategies towards its approach have been changes over the past few years and it will show further changers in next decade as indicated by the results of this study. Myocardial Infarction is the most commonly occurring cardio vascular disease which affecting more people annually. Early detection of disease is always clinically benefit. Our study supports that the prevalence of MI is higher in males as compared to females. Study patients belonging to the age group of 46 – 55 years had a high prevalence of Myocardial Infarction.

Keywords: Prevalence, Prescribing, Pattern Analysis, Myocardial Infarction Patients, Covid;

I. INTRODUCTION

Definition: The Most common form of IHD is the myocardial Infarction (MI) [1]. Myocardial infarction (MI) is the irreversible necrosis of heart muscle secondary to prolonged ischemia. This usually results from an imbalance in oxygen supply and demand, which is most often caused by plaque rupture with thrombus formation in a coronary vessel, resulting in an acute reduction of blood supply to a portion of the myocardium. Myocardial injury is reflected by elevated cardiac enzyme troponin I and T, CK-MB. Two patterns of MI can be recognized based on ECG findings. Atherosclerosis is the disease responsible for most acute coronary syndrome (ACS) cases including myocardial infarction. Approximately 90% of MI results from an acute thrombus that obstructs an atherosclerotic coronary artery. Non – atherosclerotic cause of MI include: Coronary occlusion secondary to vasculitis; ventricular hypertrophy, Coronary artery emboli [2].

1.1 Sign and Symptoms

i. Chest pain – a feeling of pressure, heaviness, tightness or squeezing across your chest.
ii. Pain in other parts of the body – it can feel as if the pain is spreading across your chest to your arms (usually the left arm, but it can affect both arms), jaw, neck, back and tummy.
iii. Feeling lightheaded or dizzy.
iv. Sweating.
v. Shortness of breath.
vi. Feeling sick (nausea) or being sick (vomiting).
vii. An overwhelming feeling of anxiety (similar to a panic attack).
viii. Coughing or wheezing[3-4].

II. REVIEW OF LITERATURE

Akanksha Mehra, Nusrat K.Bhat, Sushil K.Sharma et.al, Drug Prescribing Pattern in Patients of Myocardial Infarction in A Tertiary Care Teaching Hospital of North India, (2020) This observational study was conducted at department of pharmacology, in association with department of cardiology and included all patients of myocardial infarction visiting cardiology outpatient department or indoor patients and proforma was used to evaluate drug prescribing pattern. This study provides insight towards drug prescribing pattern in MI patients. Most frequently prescribed drugs were antiplatelets followed by hypolipidemic and proton pump inhibitors. Patients had multiple risk factors and these can be reduced by lifestyle modifications.

Dona Saju, Cristina Joy, Moushmi Arul Moorthy, et.al, Prescription Pattern and Drug Utilization Analysis in Patients with Acute Coronary Syndrome (2020) A prospective observational study for a period of 6 months was conducted in the cardiology and cardiothoracic departments of a tertiary care hospital. The sample size was determined by using Rao software and percentage of the data was calculated using Microsoft Excel 2007. A total of 270 patients were enrolled in the study in which males (219)

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dominated females (51) and were found in the age group of 60-69 years (92). Diabetes (62.9%) followed by hypertension (54.8%) were found to be the dominant risk factors. The prescribing frequency of dual antiplatelet therapy, statins, beta blockers, angiotensin converting enzyme inhibitors/angiotensin receptor blockers and nitrates was 93.3%, 97.3%, 94.1%, 76.3% / 14.1% and 41.2%. The treatment given to the patients was not completely in compliance with the ACC/ AHA guidelines (18.14%). The study provides an overall insight of the pattern of drugs prescribed to the patients with ACS which reveals the necessity of improving the rational prescribing of drugs in accordance with the standard guidelines.

III. AIM AND OBJECTIVES

3.1 Aim: Assessment of prevalence and prescribing pattern among myocardial infarction patients during COVID – 19 Era.

3.2 Objectives • To Study the prevalence of myocardial infarction patients attending tertiary care teaching hospital (SEP 2020 – SEP 2021). • To document the prescribing pattern (following prescribing indicators). [Number of drugs prescribed per prescription, Number of injections prescribed, Number of drugs prescribed in generic name, Number of drugs prescribed from essential medicine list] • To identify most commonly occurred co – morbid conditions associated with MI. • To analyses the different categories of clinical presentation for the different types of MI. • To obtain the demographic information of the patients.

3.3 Methodology

Study Design: Retrospective Cross - Sectional observational study. The study was conducted in the Department of Medicine in Raja Muthiah Medical College and Hospital, Annamalai University, Chidambaram, Tamil Nadu. It is a 1400 bedded tertiary care teaching hospital located in South India. Study Period is One Year (from September 2020-September 2021) and Sample Size is 120. Patient with myocardial infarction who has been treated as in patient. The case sheet was selected on the basis of inclusion and exclusion criteria. Patient with MI admitted in the department of medicine during the study period of either sex will be included. The age group from 18 to 80 years will be included. The age group of below 18 years will be excluded.

IV. OBSERVATION AND RESULTS

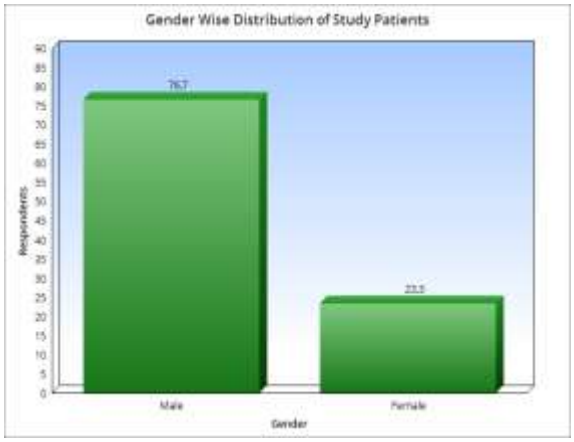
A total number of 120 cases of myocardial infarction were enrolled in our study. All myocardial infarction cases were studied and the results were taken.

4.1 Gender Wise Distribution of Study Patients

Table 1.Gender Wise Distribution of Study Patients

S No.	Gender	Number of Patients (n = 120)	Percentage (%)
1	Male	92	76.7
2	Female	28	23.3

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 3 May-June 2023, pp: 1359-1372 www.ijprajournal.com ISSN: 2249-7781



This study was carried out on MRD. Gender-wise distribution of patients showed that 76.7 % (92 patients) were male and 23.3 % (28 patients) were female as described in table 1. From our observation, males (76.7%) were mostly affected by myocardial infarction than the female (23.3%).

4.2 Age Wise Distribution of Study Patients

The study included a total of 120 patients with myocardial infarction aged between 18 – 80 years.

Table 2 Distribution of Patients According To Age

Age in Years	**Total Patients (n = 120)**	**Percentage %**
18 – 25	1	0.83
26 – 35	3	2.5
36 – 45	21	17.5
46 – 55	36	30.0
56 – 65	34	28.33
66 – 75	19	15.83
76 – 80	6	5.0

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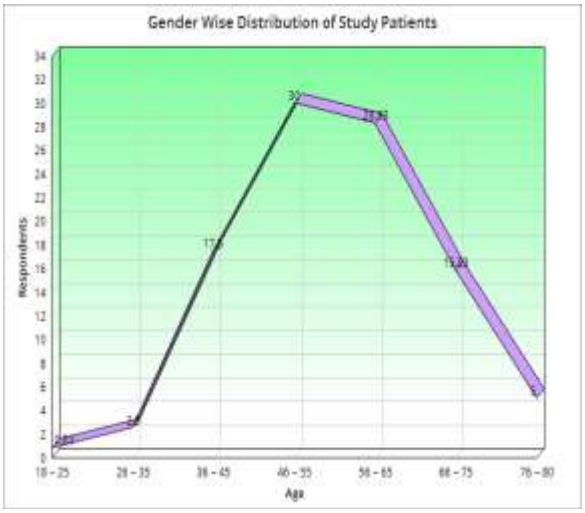

Fig 2 Distribution of Patients According To Age

In our study, based on our observation from table 2, Out of 120 patients, 30.0% (36 patients) were between the age group of 46-55, 28.33% (34 patients) were between the age group of 56-65, 17.5% (21 patients) were between the age group of 36-45, 15.83% (19 patients) were between the age group of 66-75, 5.0% (6 patients) were between the age group of 76-80, 2.5% (3 patients) were between the age group of 26-35, 0.83% (1 patients) were between the age group of 18–25.

4.3 Age & Gender Wise Distribution of Study Patients

The study included a total of 120 patients with myocardial infarction aged between 18 – 80 years.

Table 3: Age & Gender Wise Distribution of Study Patients

Age in Years	Total Patients (n = 120)	Number of Male (n = 92)	Number of Female (n = 28)	Percentage		Total Percentage
				Male	Female	
18 – 25	1	1	0	0.83%	0.0%	0.83
26 – 35	3	3	0	2.5%	0.0%	2.5
36 – 45	21	18	3	15%	2.5%	17.5
46 – 55	36	27	9	22.5%	7.5%	30.0
56 – 65	34	26	8	21.66%	6.66%	28.33
66 – 75	19	14	5	11.66%	4.16%	15.83
76 – 80	6	3	3	2.5%	2.5%	5.0

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 3 May-June 2023, pp: 1359-1372 www.ijprajournal.com ISSN: 2249-7781

When categorizing age groups by gender, 22.5% of males and 7.5% of females were found in the age group of 46 – 55 which is significantly higher in number. 21.66% of males and 6.6% of females were found in the age group of 56 – 65. 15% of males and 2.5% of females were found in the age group of 36 – 45. 11.66% of males and 4.16% of females were found in the age group of 66 – 75. 2.5% of males and 2.5% of females were found in the age group of 76 – 80. 2.5% of males and 0% of female were found in age groups of 26 – 35 and 0.83% of males and 0% of female were found in age groups of 18 – 25.

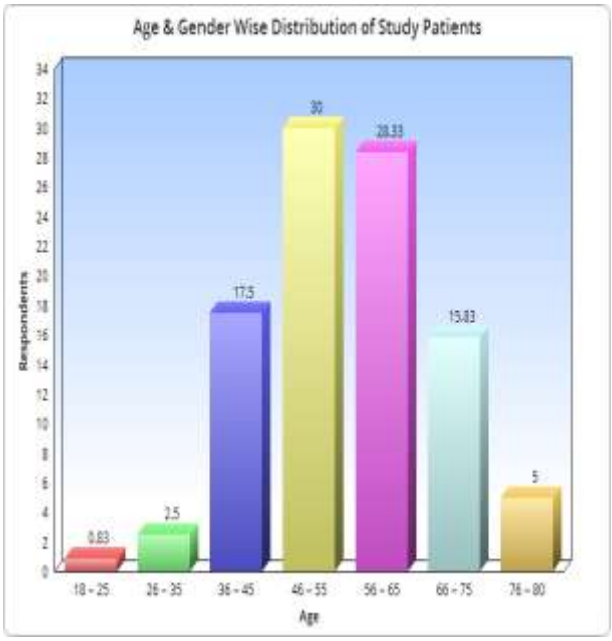

Fig. 3 Age & Gender Wise Distribution

This study revealed that, myocardial infarction was more prevalent in age groups between 46 – 55 years (22.5% of males and 7.5% of females), followed by the age group 56 – 65 years (21.66% of males and 6.6% of females).

4.4 Social Habit Wise Distribution

Social habits which include smoking, alcoholic and both were included in the study.

Table 4 Social Habit Wise Distribution

S No.	Social Habit	Number of Patients (n = 120)	Percentage (%)
1	Alcoholic	9	7.5
2	Smoker	4	3.33
3	Alcoholic & Smoker	20	16.66
4	No social habit	87	72.5

Out of 120 patients, **72.5%** of them had no social habits.

International Journal of Pharmaceutical Research and Applications
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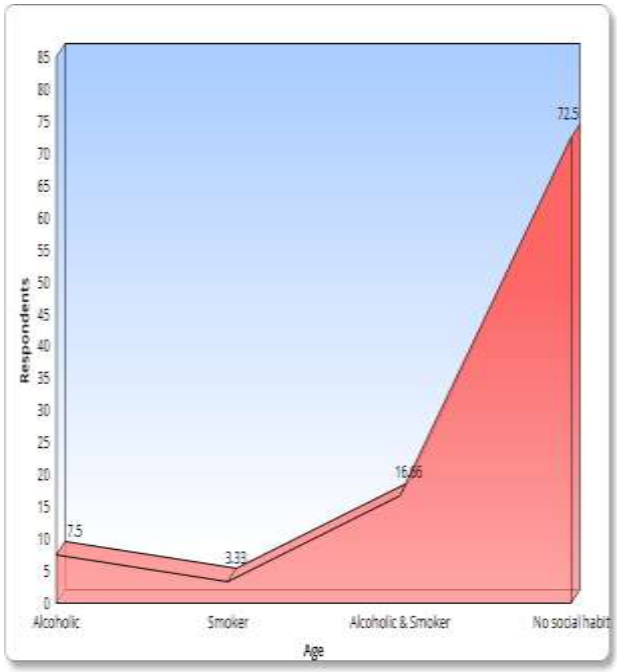

Fig 4 Social Habit Wise Distribution

This study revealed that 27.5% of them were associated with some social habit, 7.5% of them were alcoholic, 3.33% of them were smokers and 16.66% of them were both smokers and alcoholics.

4.5 Past Medical Conditions of MI Patient

Table 5 Past Medical Conditions Of MI Patient

Past Medical History	No. of Patients	Percentage
CAD	1	0.83
CAD + HTN	2	1.66
CAD + DM + HTN	5	4.16
CKD	1	0.83
CKD + DM + HTN	2	1.66
COPD	2	1.66
COPD + HTN	2	1.66
DM	22	18.33
DM + HTN	20	16.66
HTN	14	11.66
HTN + SEIZURE	1	0.83

International Journal of Pharmaceutical Research and Applications
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HTN + DYSLIPIDEMIA	1	0.83
NO PAST HISTORY	47	39.16
TOTAL	120	100

Out of 120 patients, **39.16%** of them had no past medical history.

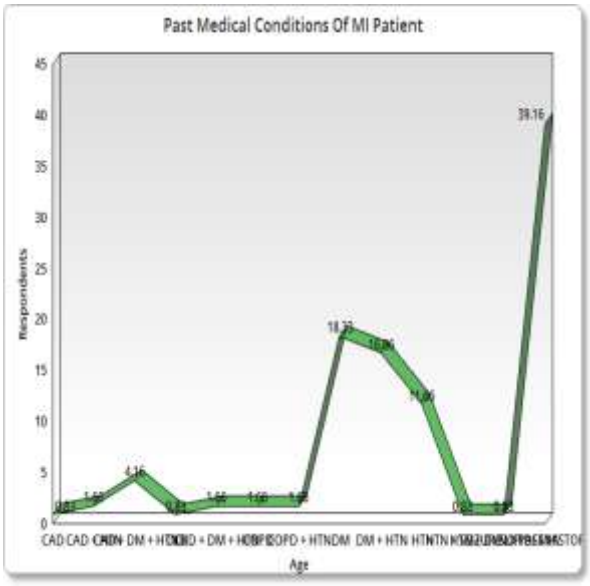

Fig 5 Past Medical Conditions Of Mi Patient

In our study, based on our observation from table 6.5, Among 120 patients, **22(18.33%)** of the patients were with past medical condition of **Diabetes mellitus**, **20(16.66%)** of the patients were with past medical condition of **Hypertension and diabetes mellitus** and **14(11.66%)** of the patients were with past medical condition of **Hypertension**. Hypertension and Diabetes mellitus are major causes which can lead to blood vessel damage resulting in atherosclerosis.

4.6 Distribution of MI Patient

Table 6 Distribution of MI Patient

S No.	Types	Number of Patients (n = 120)	Percentage
1	STEMI	101	84.16
2	NSTEMI	17	14.16
3	UNSTABLE ANGINA	2	1.66

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 3 May-June 2023, pp: 1359-1372 www.ijprajournal.com ISSN: 2249-7781

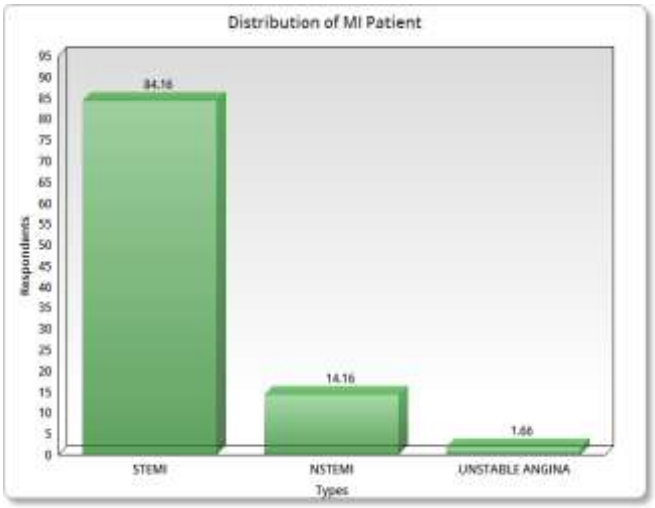

Fig 5. Distribution of MI Patient

From the assessment of 120 patients, the most prevalent type of MI was found to be STEMI (84.16%), followed by NSTEMI (14.16%) and Unstable Angina (1.66%) as shown in Table 6

Table 6 Distribution of Stemi Patient

S No.	Types	Number of Patients (n = 101)	Percentage
1	Anterior wall MI	21	20.79
2	Anterolateral wall MI	21	20.79
3	Anteroseptal wall MI	7	6.93
4	High Lateral wall MI	1	0.99
5	Inferior wall MI	30	29.70
6	Inferolateral Wall MI	16	15.84
7	Posterior Wall MI	5	4.95
	Total	101	100

In our study, based on our observation from table 6.6.2, Out of 101 patients of STEMI, 29.70% (30 patients) were belong to group of Inferior Wall MI, followed by 20.79% (21 patients) were belong to group of Anterior Wall MI, 20.79% (21 patients) were belong to group of Anterolateral Wall MI and 15.84% (16 patients) were belong to group of Inferolateral Wall MI.

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 3 May-June 2023, pp: 1359-1372 www.ijprajournal.com ISSN: 2249-7781

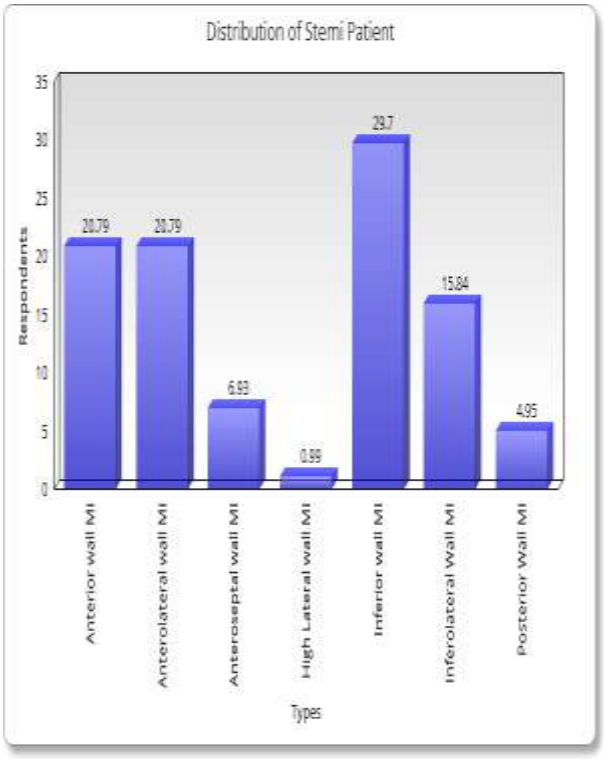

Fig 7 Distribution of Stemi Patient

4.7 Route of Administration of Drug

ROA	SUB CLASS	FREQUENCY	PERCENTAGE	
Injectables	-	509	36.99%	
Oral	Tablets	783	56.90	62.79%
	Syrups	81	5.88	
Topical	-	3	0.22%	
Total		1376	100%	

Table 7 Route of Administration of Drug

From the assessment of 1376 drugs, 62.79% of drugs were prescribed as oral, 36.99% of drugs as injections and 0.22% of drugs as topical respectively.

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 3 May-June 2023, pp: 1359-1372 www.ijprajournal.com ISSN: 2249-7781

4.8 Cardiovascular Drugs Prescribed To MI Patients

Table 8 Cardiovascular Drugs Precribed To Mi Patients

S No.	Class And Name of Drug	No. of Patient	Percentage of Patient (%)
1.	**ACE INHIBITORS**		
	Ramipril	10	8.33%
	Enalapril	76	63.33%
2.	**ANGIOTENSIN RECEPTOR BLOCKERS**		
	Losartan	3	2.5%
	Telmisartan	3	2.5%
	Valsartan	1	0.83%
3.	**ANTIANGINAL**		
	Isosorbide Dinitrate	23	19.16%
	Nitroglycerin	13	10.83%
	Ivabradine	4	3.33%
	Nicorandil	3	2.5%
	Trimetazidine	8	6.66%
4.	**ANTICOAGULANT**		
	Enoxaparin	30	25%
	Heparin	82	68.33%
5.	**ANTIPLATELET**		
	Aspirin	120	100%
	Clopidogrel	117	97.5%
	Ticagrelor	1	0.83%
6.	**BETA BLOCKERS**		
	Bisoprolol	1	0.83%
	Carvedilol	4	3.33%
	Metoprolol	45	37.5%
7.	**CALCIUM CHANNEL BLOCKERS**		
	Amlodipine	1	0.83%
8.	**DIURETICS**		
	Furosemide	15	12.5%
	Mannitol	1	0.83%
	Spironolactone	4	3.33%
9.	**HMG CO – A REDUCTASE INHIBITOR**		
	Atorvastatin	118	98.33%
10.	**THROMBOLYTICS**		
	Streptokinase	72	60%
	Tenecteplase	18	15%

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 3 May-June 2023, pp: 1359-1372 www.ijprajournal.com ISSN: 2249-7781

Based on Table 8 shows Aspirin & Clopidogrel (117, 97.5%) were most commonly prescribed antiplatelet drugs; other antiplatelet drugs were Ticagrelor (1, 0.83%). overall, 99.58% of patients were prescribed with antiplatelet drugs.

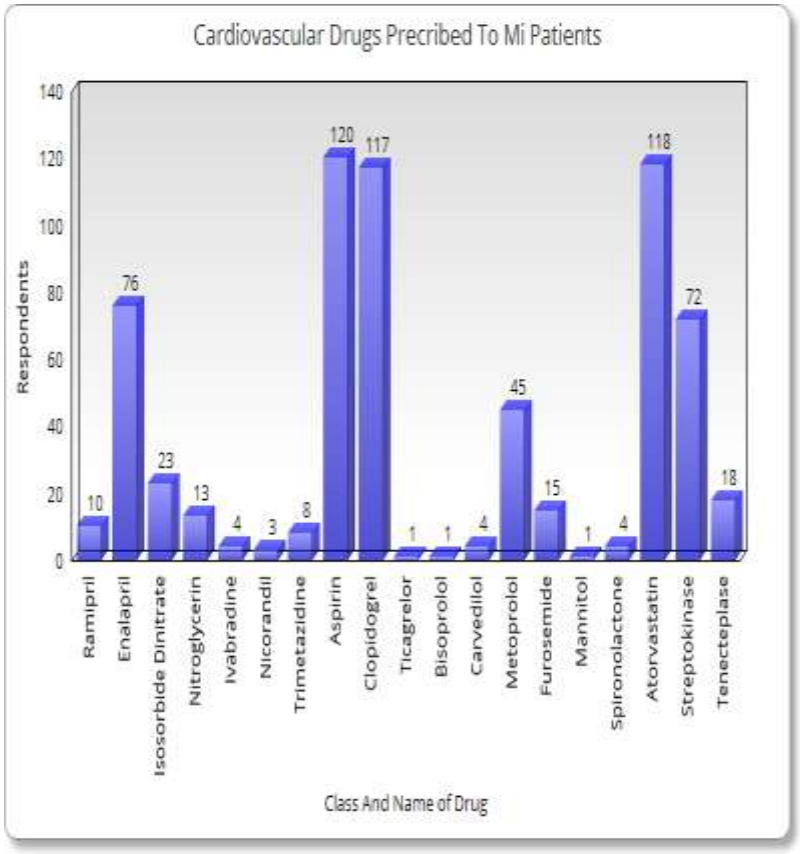

Fig 8. Cardiovascular Drugs Prescribed To Mi Patients

Atorvastatin (118, 98.33%) was the only HMG Co-A reductase inhibitor drug prescribed. Heparin (82, 68.33%) was the most commonly prescribed anticoagulant, followed by Enoxaparin (30, 25%). Overall, 95.82% of patients were prescribed Anticoagulant drugs. Streptokinase (72, 60%) & Tenecteplase (18, 15%) were most commonly prescribed thrombolytics. Overall, 75% of patients were prescribed with Thrombolytic drugs. Enalapril (76, 63.33%) & Ramipril (10, 8.33%) were most commonly prescribed ACE inhibitors. Overall, 71.66% of patients were prescribed with ACE inhibitors. Isosorbide dinitrate (23, 19.16%) & Nitro-glycerine (13, 10.83%) were most commonly prescribed Antianginal drugs. Followed by Trimetazidine (8, 6.66%), Ivabradine (4, 3.33%), Nicorandil (3, 2.5%). Overall, 42.48% of patients were prescribed with Antianginal drugs. Metoprolol (45, 37.5%) were the most commonly prescribed Beta-blockers followed by Carvedilol (4, 3.33%) and Bisoprolol (1, 0.83%). Overall, 41.66% of patients were prescribed with Beta-blockers. Furosemide (15, 12.5%) were the most commonly prescribed Diuretics. Followed by Spironolactone (4, 3.33%) and Mannitol (1, 0.83%). Overall, 16.66% of patients were prescribed with Diuretics. Losartan (3, 2.5%), Telmisartan (3,2.5%) and Valsartan (1, 0.83%) are the most commonly used Angiotensin receptor blockers. Overall, 5.83% of patients were prescribed with Angiotensin receptor blockers.

Amlodipine (1, 0.83%) was the only Calcium channel blocker which prescribed to the patients mostly.

V. DISCUSSION

In this Study, out of 120 patients, based on Table 6.1, 92 (76.7%) were Male and 28 (23.3%) were Females. The incidence of Myocardial Infarction in males was higher compared to female patients. Similar findings with male predominance were seen in studies conducted by Indrajit Kumar

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 3 May-June 2023, pp: 1359-1372 www.ijprajournal.com ISSN: 2249-7781

et.al showed 62% males and 38% females (34).Based on Table 6.2, Study patients belonging to the age group of 46 – 55 years 36 (30%) had a high prevalence of Myocardial Infarction. When categorizing age groups by gender, 22.5% of males and 7.5% of females were found in the age group of 46 – 55 which is significantly higher in number. From our study, we observed that patients without any social habit 87 (72.5%) were found to have a high prevalence of Myocardial Infarction. Which shows that people with healthy habits were also affected by sudden onset of MI. The patient without of any past medical condition 47 (39.16%) followed by Diabetes Mellitus 22 (18.33%) & Diabetes Mellitus + Hypertension 20 (16.66%). Diabetes Mellitus and Hypertension are major causes which can lead to blood vessel damage resulting in Myocardial Infarction.

In this study, different types of MI were identified, which included 101 (84.16%) patients who were with STEMI, 17 (14.16%) were with NSTEMI and 2 (1.66%) were with Unstable angina. Out of 101 patients of STEMI, 30 (29.70%) were belong to Inferior Wall MI, followed by 21 (20.79%) were belong to Anterior Wall MI and Anterolateral wall MI respectively. The average length of patient stay was found to be 3 days.

Based on the route of administration, Oral route drugs 864 (62.79%) were prescribed to the patient. Followed by Injectables 509 (36.99%) and Topical 3 (0.22%). Treatment of ACS involves categories of drugs namely Anti-platelet drugs, anticoagulants, fibrinolytics, anti-anginal, anti-hypertensives, anti-hyperlipidaemic, antidiabetics, antibiotics, miscellaneous drugs etc. were enrolled. In study by Manohar Ganapathi Revankar et al, commonly prescribed drugs were anti-platelets (91.7%), Antianginal (66.7%), hypolipidemic (63.9%) followed by Anticoagulant (15.7%). Most of the patients received Aspirin as well as Clopidogrel (35). Similar results were found in our study, the percentage of prescription pattern of various classes of drug was Antiplatelets (99.59%), HMG Co – A reductase inhibitors (98.33%), Anticoagulant (95.82%), Proton pump inhibitor (80.82%), Benzodiazepines (79.99%), Laxative (78.33%), Thrombolytics (75%), ACE inhibitors (71.66%), Antiemetics (64.99%), Antidiabetic (60.82%), Antianginal (42.48%), Beta blockers (41.66%), Antihistamine (31.65%), Antibiotics (29.98%), Diuretics (16.66%), Hematinic (15.81%), Opioid analgesics (9.98%), NSAID's (8.33%) Adrenergic drugs (6.66%), Angiotensin receptor blockers (5.83%), Gastrointestinal protectant (4.16%), Antifibrinolytics (2.50%), Corticosteroids (2.49), Thyroid Hormone (2.49%), Others (2.49%), Alkalizing agent (1.66%), Anti amoebic drugs (1.66%), Anti arrhythmic (1.66%), Anticholinergic (1.66%), Expectorants (1.66%), Leukotrienes antagonist (1.66%), Oligomeric flavonoids (1.66%) and Anthelmintic, Antiepileptic drugs, Antifungal drugs, Calcium channel blockers, Histaminergic agonist, Mucolytics, Proteolytic enzyme, Sedative hypnotics and Urinary antiseptics (0.83%) drugs respectively.

Aspirin & Clopidogrel 117 (97.5%) were most commonly prescribed antiplatelet drugs. Atorvastatin 118 (98.33%) was the only HMG Co-A reductase inhibitor drug prescribed. Heparin 82 (68.33%) & Enoxaparin 30 (25%) were most commonly prescribed anticoagulants. Pantoprazole 93 (77.5%) was the most commonly prescribed proton pump inhibitor. Alprazolam 45 (37.5%) and Clonazepam 39 (32.5%) were most commonly prescribed Benzodiazepine. Liquid paraffin & Milk of Magnesia 78 (65%) were most commonly prescribed Laxative. The average number of drugs per prescription encounter was 11.46. Which was justifiable even though it is more than WHO standard (1.6 – 4.8), as they were prescribed for cardiovascular emergency (myocardial infarction). This cannot be considered as poly pharmacy as there is need for empirical therapy till diagnosis becomes clearer and for management of life-threatening conditions.

The percentage of drugs prescribed by generic names was about 811 (58.93%). According to WHO standard, it was 100%. Prescribing drugs under generic names increases patient compliance, minimizes drug costs and the chance of duplication is avoided. The percentage of antibiotics prescribed was approximately 36 (2.61%). The WHO recommended value is less than 30%. Irrational use of antibiotics may lead to various health hazards in patients, so precautions should be taken when antibiotics are used.

The percentage of encounters with an injection prescribed was 509 (36.99%); this was higher than the WHO standard value (<20%). This is justifiable in case of drugs which is need immediate action. The drugs like low molecular heparin, streptokinase, insulin, morphine, ondansetron etc. should be given by injectable routes in emergency situations. In the present study, these drugs were used for immediate action and to save patients from life-threatening conditions. Prescribing from the essential drug list means rational prescribing. The present study revealed that the percentage of drugs prescribed

International Journal of Pharmaceutical Research and Applications
Volume 8, Issue 3 May-June 2023, pp: 1359-1372 www.ijprajournal.com ISSN: 2249-7781

from the essential drug list was found to be 896 (65.11%).

VI. CONCLUSION

From the findings of the present study, we can conclude:

Myocardial Infarction is the most commonly occurring cardio vascular disease which affecting more people annually. Early detection of disease is always clinically benefit. Our study supports that the prevalence of MI is higher in males as compared to females. Study patients belonging to the age group of 46 – 55 years had a high prevalence of Myocardial Infarction. Among 120 patients with Myocardial infarction, STEMI had the highest prevalence rate of 84.16% followed by NSTEMI with a prevalence rate of 14.16%. Out of 101 STEMI patients Inferior wall MI, Anterior wall MI and Anterolateral wall MI had the highest prevalence. Our study shows that among 120 patients, Diabetes mellitus (18.33%, Diabetes mellitus and Hypertension (16.66%) were the most commonly occurred co-morbid condition associated with MI. This study shows that protocol of the management of concerned hospital found near to the recommended standard treatment guidelines. The most commonly prescribed drug class was Antiplatelets, HMG Co – A reductase inhibitors, Anticoagulants, Proton pump inhibitors, Benzodiazepines, Thrombolytics and ACE inhibitors. Aspirin, clopidogrel, atorvastatin, heparin and pantoprazole were more commonly prescribed drugs to the patient. The average number of drugs per prescription was found to be **11.46** and antibiotic drug per prescription was found to be **2.61%.** Percentage of drugs prescribed by generic name was found to be 58.93%. The percentage of drugs prescribed from the essential drug list was found to be 65.11% and the percentage of encounters with an injection prescribed was 36.99%. Thus, it can be concluded that the trends in prescribing medication in case of myocardial infarction and the strategies towards its approach have been changes over the past few years and it will show further changers in next decade as indicated by the results of this study.

REFERENCE

[1]. Tiwari H, Kumar A, Kulkarni SK. Prescription Monitoring of Anti-Hypertension Drug Utilization at The Punjab University Health Care in India. 2004; 45: 117 – 20.

[2]. Indrajit Kumar, Trishla, et al. To Determine the Prescription Pattern of Drugs Used in Myocardial Infarction in Bihar Region: an Observational Study. 2020; 7(10): 3975 – 80.

[3]. Manohar Ganapathi Revankar, Vijaya Manohar Revankar, et al. A Retrospective Study on Prescription Pattern of Drug Used in Myocardial Infarction in A South Indian Tertiary Care Hospital. 2018; 3(3): 101 – 103.

[4]. Muthuvel T, Nitty Reji, Vipin V, et al. A Prospective Study on Drug Utilization and Evaluation of Prescribing Pattern of Drugs Use in Patients of Myocardial Infarction. 2018; 8(3): 615 – 633.

[5]. Tanna PJ, Hotha PP, Thakkar SC. A study on prescribing pattern of drugs prescribed in patients of acute myocardial infarction admitted in ICCU at a tertiary care hospital. Int J Res Pharmacol Pharmacother. 2019;8(1):97-104.

[6]. Vyas A, Ahamed J, Batar KK, Gehlot A. To study Prescription pattern of drugs and other prophylactic measurements for survivors of acute myocardial infarction at tertiary care teaching hospital, western Rajasthan. Int J Sci Res. 2019;8(7):9-11.

[7]. Jewargi PKB, Mala RD. Drug utilization study in Congestive Heart Failure at a Tertiary Care Hospital. Sch J App Med Sci. 2015;3(2):857-62.

[8]. . Pendhari SR, Chaudhari DR, Burute SR, Bite BM. A study on the drug utilization trends in the cardiovascular emergencies in a tertiary care hospital. J Clin Diagn Res. 2013;7(4):666-70.

[9]. Patel R, Jawaid T, Shukla PK, Singh MP. Evaluation of Drug utilization pattern in patient of Myocardial Infarction and Prevalence of the MI by comparison of Age, Sex, Diet, Smokers and Non-smokers, Alcoholic and Non-alcoholic. Am J Pharmacol Pharmacother. 2015;2(1):72-80.

[10]. Nagabushan H, Roopadevi HS, Prakash GM, Pankaja R. A prospective study of drug utilization pattern in cardiac intensive care unit at a tertiary care teaching hospital. Int J Basic Clin Pharmacol. 2015;4(3):579- 83.

[11]. Association of Physicians of India. API expert consensus document on management of ischemic heart disease. J Assoc Physicians India. 2006;54:469- 80.

[12]. 10. Deshmukh S, Deshpande A, Kulkarni ND. Clinical profile of Acute Myocardial Infarction patients from Rural India. JMSCR. 2017;5(11):30106-11.

[13]. Ghosh A, Das AK, Pramanik S, Saha UK. Drug utilization study in patients of Acute Coronary Syndrome on follow-up visits at a Tertiary Care Centre in Kolkata. Asian J Pharm Life Sci. 2012;2(2):155-65.
[14]. Pandey S, Pandey S, Jhanwar P, Jhanwar A. A prospective study of Myocardial Infarction patients admitted in a tertiary care hospital of south-eastern Rajasthan. Int J Biol Med Res. 2012;3(2):1694-96.
[15]. Gan SC, Beaver SK, Houck PM, MacLehose RF, Lawson HW, Chan L. Treatment of Acute Myocardial Infarction and 30 days Mortality among Women and Men. N Engl J Med. 2000;343(1):8-15.
[16]. George J, Devi P, Kamath DY, Anthony N, Kunnoor NS, Sanil SS. Patterns and determinants of cardiovascular drug utilization in coronary care unit patients of a tertiary care hospital. J Cardiovasc Dis Res. 2013;4(4):214-21.