



Monthly Heart Failure audit report on GDMT in Heart City, December 2024

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1. Background

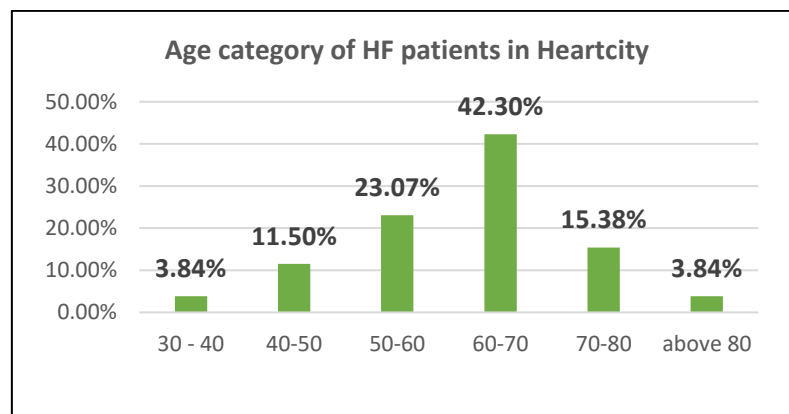
Heart failure (HF) remains a significant global health challenge, affecting millions of individuals worldwide and imposing substantial burdens on healthcare systems. Despite advances in therapeutic strategies, HF continues to be associated with high rates of morbidity, mortality, and hospitalizations, making it a leading cause of cardiovascular-related deaths globally.

Guideline-directed medical therapy (GDMT) plays a pivotal role in the management of HF, aiming to alleviate symptoms, improve quality of life, and reduce adverse outcomes.

This is follow-up audit of Heart failure in Heart City for the month of December 2024. The study included 26 patients with heart failure. Data was collected and interpreted. The significance of findings was tested

2. Report

1) Age category of HF patients in Heart city



2) Sex category of HF patients in Heart city

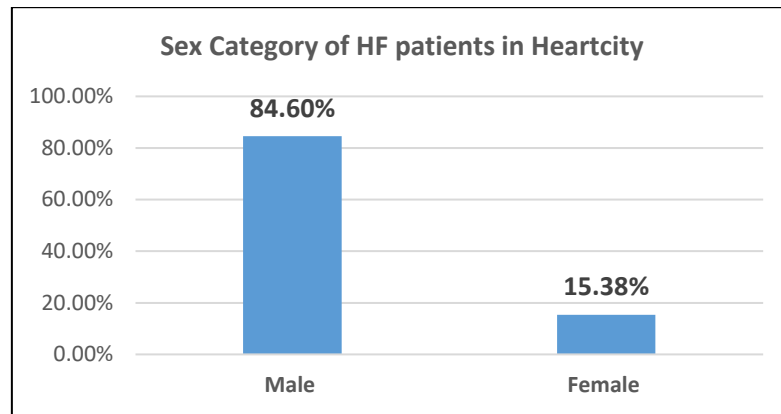
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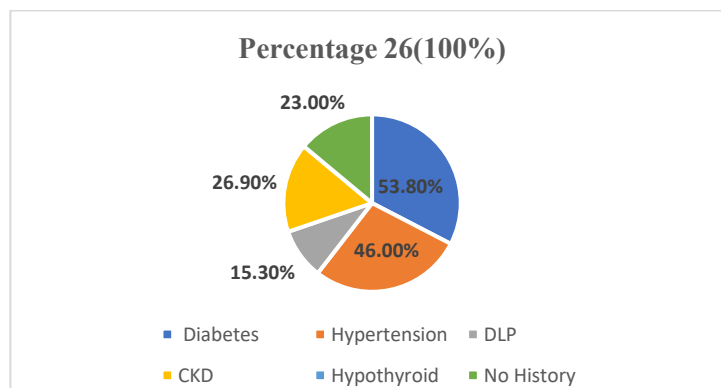


3) ECHO findings of HF patients in Heart city

ECHO (EF%) n=26	Percentage (100%)
Severe LV Dysfunction	13 (50%)
Moderate to Severe LV Dysfunction	3 (11.53%)
Moderate LV Dysfunction	7 (26.92%)
Mild LV dysfunction	3 (11.53%)

4) Past medical history of HF patients in Heart city

Past Medical History	Percentage 26(100%)
Diabetes	14 (53.8%)
Hypertension	12 (46%)
DLP	4 (15.3%)
CKD	7 (26.9%)
Hypothyroid	3 (11.53%)
No History	6 (23%)



5) Predominant symptoms of HF patients in Heart city

Complaints	Percentage 26(100%)
Breathlessness	12 (46.15%)
Chest pain	14 (53.8%)

6) Medication therapy of HF patients during admission in Heart city

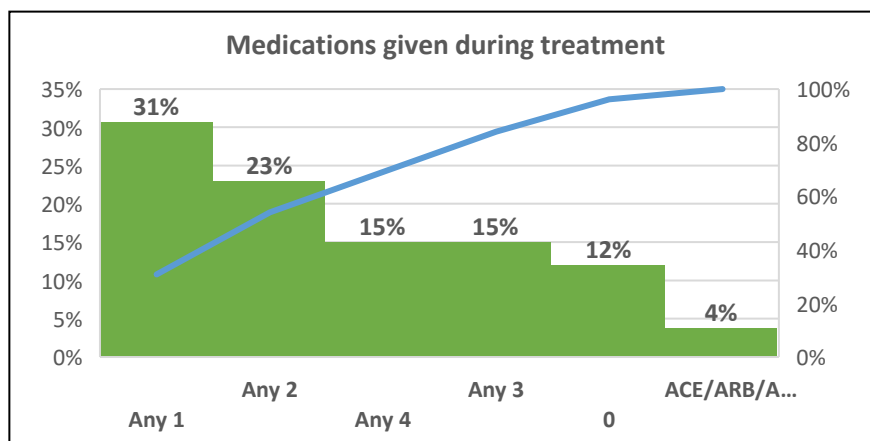
11.5% of patients have not received any Guideline Directed Medical Treatment. 58% of patients received diuretics, 46% received Cardio selective Beta-blockers.

Medication therapy of HF patients during admission		
Drugs (GDMT)	Percentage (100%)	Frequency=26
SGLT2i (DAPA)	30%	8
Diuretics (Furosemide& Torsemide)	58%	15
Cardio selective beta blocker (Carvedilol, bisoprolol)	46%	12
ACE/ARB/ARNI (Ramipril, Sacubitril valsartan)	15.30%	4
Mineralocorticoid Receptor Antagonist	38.40%	10
No GDMT drugs	11.53%	3

7) Number of GDMT drugs given during admission for HF patients in Heart city

Only 4% received all 4 GDMT drugs, 12% of patients received no GDMT drugs.

Medications given during treatment	Percentage	Frequency
ACE/ARB/ARNI, SGLT2, BB, MRA, Diuretics	4%	1
Any 4	15%	4
Any 3	15%	4
Any 2	23%	6
Any 1	31%	8
0	12%	3



3. Discussion

This study highlights the status of Guideline Directed Medical Treatment among the study population attending inpatient at Kauvery hospital, Heart City during Dec 2024

We hope to audit the status of management of Heart Failure every month and report the trend

The main outcomes reflect the proportion of patients who receive GDMT during their hospitalization.

The patients whose primary complaint is breathlessness invariably have Heart Failure

Maximum number of patients (42.3%) were in the age group of 60-70 years.

13(60%) of patients had Severe LV Dysfunction. Diabetes (53.8%) was the most common risk factor among our population.

Most patients were on a loop diuretic (58%). GDMT (SGLT2I, ARNI, MRA & Cardio selective beta-blocker) drugs proportion were 30%, 15%, 38.40% & 46% respectively).

GDMT for Heart Failure needs to be instituted as early as possible, starting at NYHA Stage 1 and titrated at Heart Failure Clinics by a well – trained member of the primary physician's team and needs to be protocol – based.

The clinical outcomes shall be gratifying. Primarily, they improve the quality of life.

4. Importance of GDMT

- GDMT represents the most up-to-date and evidence-based approach to managing heart failure, ensuring that patients receive therapies proven to be effective in improving outcomes and reducing morbidity and mortality.
- By addressing various aspects of disease progression, such as neurohormonal activation, endothelial dysfunction, inflammation, and ventricular remodeling, GDMT helps optimize disease management and improve patient outcomes.
- GDMT has been shown to reduce the risk of cardiovascular events, including heart failure exacerbations, myocardial infarction, stroke, and cardiovascular death.
- GDMT aims not only to manage symptoms but also to slow or halt the progression of heart failures. By targeting key pathophysiological processes involved in disease progression, such as myocardial remodeling, fibrosis, and atherosclerosis, GDMT helps prevent further deterioration of cardiac function and structural abnormalities.

In conclusion, conducting an audit focusing on guideline-directed medical therapy (GDMT) in heart failure (HF) management is essential for assessing adherence to evidence-based guidelines and optimizing patient care. Continued efforts to monitor and evaluate GDMT utilization through audits are critical for advancing evidence-based practice and achieving optimal outcomes in HF care.

5. References to our previous publications

- [1]. D. Suryaprabha, M. Vinitha, & B. Chandru. (2024). Guideline-Directed Medical Treatment (GDMT) of Heart Failure at Kauvery Hospitals: A Clinical Audit. *Kauverian Medical Journal*, 1(5),7–11. Retrieved from <https://kauverianjournal.com/index.php/research/article/view/25>
- [2]. N. Dharsshini, N.R. Vijayalakshmi, & M. Vinitha. (2024). A prospective observational study on the prescription of Guideline Directed Medical Treatment (GDMT) for Heart Failure at Kauvery Heart City. *Kauverian Medical Journal*, 1(7), 13–18. Retrieved from <https://www.kauverianjournal.com/index.php/research/article/view/66>