**Evaluation of Clinical Characteristics and 90-day Outcomes amongst Heart Failure Patients: Insights from a Tertiary-care Hospital Settings**

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**Introduction.** Heart Failure (HF) is a chronic, multi-faceted, life-threatening condition that has become a major global public health concern.

**Aims.** To assess clinical characteristics, prescribing patterns, and 90-day clinical outcomes of patients with HF.

**Methods.** A six-month prospective cohort study was carried out with HF patients aged ≥ 18, of any sex, in New York Heart Association (NYHA) Class I-III with LVEF ≤ 40% to > 50%, at a tertiary-care hospital's Cardiology department. After consenting, their complaints, past medications, and current treatments were recorded. Data were analysed using frequencies, percentages, and linear regression to identify outcome predictors.

**Results.** A total of 84 patients (75% male, 25% female, mean age 60.08 ± 10.11 years), 94% had heart failure with reduced ejection fraction (HFrEF), with 44% *de-novo,* and 48% in NYHA class III were enrolled in the study. Hypertension (HTN) and type 2 diabetes mellitus (T2DM) were prevalent comorbidities (67% and 54%, respectively). 35% were hospitalized for ischemic heart disease (IHD) and 12% for dilated cardiomyopathy (DCM). Of 685 prescribed medications (average 8.2 per patient, mean 10.54), only 37% were guideline-directed medical therapy (GDMT), with β-Blockers (89%), sodium-glucose cotransporter-2 (SGLT2) inhibitors (68%), angiotensin receptor-neprilysin inhibitors (ARNI) (67%), and mineralocorticoid receptor antagonists (MRA) (50%) most prescribed. The 90-day mortality was 2%, with a 10% readmission rate for acute decompensated heart failure (ADHF) and an average hospital stay of 4.46 ± 1.60 days. Ischemic heart disease emerged as a significant predictor for 90-day outcomes (β = 0.503 [0.113-0.573], p = 0.004).

**Conclusion.** IHD is one of the predictors implicating heart failure in the study cohort. The 90-day mortality was two in every ten patients and the majority of the management did not comply with GDMT, which demands drug therapy optimization in anticipation of improved clinical outcomes.

**Keywords:** *Heart failure, Ischemic heart disease, Guideline-directed medical therapy, Acute decompensated heart failure.*