

## **Clinical Characteristics of Acute Heart Failure Patients**

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**Background:** Hospitalized heart failure (HHF) is a challenging clinical entity in cardiology. Data on HHF patients from the Middle East is scarce. Observational studies may provide an initial insight that could improve disease management and guide the design of future clinical trials.

**Objective:** To evaluate the management, in-hospital mortality, and one-year readmission predictors of HHF patients admitted to the coronary care unit.

**Setting:** Coronary Care Unit, Salmaniya Medical Complex, Bahrain.

**Design:** A Prospective Study.

**Method:** Two hundred forty-five HHF patients were included in the study. Clinical data during hospitalization and upon discharge were recorded from 1 January 2012 to 31 March 2012. Follow-up was extended for 12-months for readmissions with heart failure (HF).

**Result:** One hundred seventy (69%) were males, and the mean age was 64 years. The main causes of HF decompensation were non-compliance 59 (24%), myocardial ischemia 51 (21%) and hypertensive crisis 39 (16%). Comorbidities included were systemic hypertension, 179 (73%), hyperlipidemia, 166 (68%), and diabetes mellitus, 161 (64%). The mean left ventricular ejection fraction (EF) was 34%. In-hospital mortality rate was 9.4%. Patients who were taking angiotensin receptor blockers (ARB) before admission had reduced in-hospital mortality. Upon discharge, 213 (87%) patients were taking renin-angiotensin system blockers, 170 (69%) were taking beta-blockers, and 66 (27%) were taking mineralocorticoid receptor antagonist (MRA). The rate of readmission with HF was 47% at one year.

**Conclusion:** HHF patients in this study have multiple comorbidities and an increased in-hospital mortality. In-hospital mortality-related variables and predictors of HF readmission should be verified in a larger population and employed in clinical practice, as these factors might help to improve patient outcome.