



**AC020**

**Adult Cardiology & Clinical Cardiovascular Medicine** • Poster Presentation

## **IMPACT OF CHRONIC KIDNEY DISEASE OF HEART FAILURE PHENOTYPES**

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**Background** Chronic kidney disease (CKD) and heart failure (HF) commonly coexist with associated poor outcomes. However, the impact of CKD may differ across HF phenotypes, including heart failure with reduced ejection fraction, EF <40% (HFrEF), heart failure with mildly reduced ejection fraction (HFmrEF), EF 41-49% and heart failure with preserved ejection fraction, EF > 50% (HFpEF). This study aims to evaluate the prevalence, clinical characteristics, and 12-month outcomes and impact of CKD across HF phenotypes in a tertiary hospital cohort.

**Methods:** There were 1069 HF participants who were from the Ibadan Heart Failure Project, which is a prospective study of chronic heart failure patients. Patients were classified into HFrEF, HFmrEF, HFpEF. CKD was defined as eGFR <60 mL/min/1.73m<sup>2</sup> for ≥3 months. The primary outcome was a composite of all-cause mortality and HF rehospitalization at 12 months.

**Results** Of the 1069 patients, mean age was 56.6± 15.2 years and 572(53.5%) were male. CKD prevalence was 415(38.8%) overall: 171(41.2%) in HFrEF, 75(18.1%) in HFmrEF and 169 (40.7%) in HFpEF, p=0.013. Patients with CKD were older, had more hypertension, diabetes. The 12-month all-cause mortality was higher in HF patients with CKD. The risk was highest in HFrEF + CKD.

**Conclusion** CKD is common in all HF phenotypes but is most prevalent in HFrEF. Its presence confers the greatest adverse prognostic impact in HFrEF and CKD, suggesting a distinct cardio-renal interaction in this group. Early renal assessment and phenotype-specific management strategies are needed to improve outcomes

**Keywords:** Chronic kidney disease, heart failure phenotypes, HFpEF, HFrEF, prognosis, cardio-renal syndrome