

Prevalence, treatment, and outcome of acute heart failure in 1006 Africans from 9 countries.

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Abstract:

BACKGROUND: Acute heart failure (AHF) in sub-Saharan Africa has not been well characterized. Therefore, we sought to describe the characteristics, treatment, and outcomes of patients admitted with AHF in sub-Saharan Africa. **METHODS:** The Sub-Saharan Africa Survey of Heart Failure (THESUS-HF) was a prospective, multicenter, observational survey of patients with AHF admitted to 12 university hospitals in 9 countries. Among patients presenting with AHF, we determined the causes, treatment, and outcomes during 6 months of follow-up. **RESULTS:** From July 1, 2007, to June 30, 2010, we enrolled 1006 patients presenting with AHF. Mean (SD) age was 52.3 (18.3) years, 511 (50.8%) were women, and the predominant race was black African (984 of 999 [98.5%]). Mean (SD) left ventricular ejection fraction was 39.5% (16.5%). Heart failure was most commonly due to hypertension (n = 453 [45.4%]) and rheumatic heart disease (n = 143 [14.3%]). Ischemic heart disease (n = 77 [7.7%]) was not a common cause of AHF. Concurrent renal dysfunction (estimated glomerular filtration rate, <30 mL/min/1.73 m²), diabetes mellitus, anemia (hemoglobin level, <10 g/dL), and atrial fibrillation were found in 73 (7.7%), 114 (11.4%), 147 (15.2%), and 184 cases (18.3%), respectively; 65 of 500 patients undergoing testing (13.0%) were seropositive for the human immunodeficiency virus. The median hospital stay was 7 days (interquartile range, 5-10), with an in-hospital mortality of 4.2%. Estimated 180-day mortality was 17.8% (95% CI, 15.4%-20.6%). Most patients were treated with renin-angiotensin system blockers but not β -blockers at discharge. Hydralazine hydrochloride and nitrates were rarely used. **CONCLUSIONS:** In African patients, AHF has a predominantly nonischemic cause, most commonly hypertension. The condition occurs in middle-aged adults, equally in men and women, and is associated with high mortality. The outcome is similar to that observed in non-African AHF registries, suggesting that AHF has a dire prognosis globally, regardless of the cause.