

Abstract

AIMS:

Contrary to elderly patients with ischaemic-related acute heart failure (AHF) typically enrolled in North American and European registries, patients enrolled in the sub-Saharan Africa Survey of Heart Failure (THESUS-HF) were middle-aged with AHF due primarily to non-ischaemic causes. We sought to describe factors prognostic of re-admission and death in this developing population.

METHODS AND RESULTS:

Prognostic models were developed from data collected on 1006 patients enrolled in THESUS-HF, a prospective registry of AHF patients in 12 hospitals in nine sub-Saharan African countries, mostly in Nigeria, Uganda, and South Africa. The main predictors of 60-day re-admission or death in a model excluding the geographic region were a history of malignancy and severe lung disease, admission systolic blood pressure, heart rate and signs of congestion (rales), kidney function (BUN), and echocardiographic ejection fraction. In a model including region, the Southern region had a higher risk. Age and admission sodium levels were not prognostic. Predictors of 180-day mortality included malignancy, severe lung disease, smoking history, systolic blood pressure, heart rate, and symptoms and signs of congestion (orthopnoea, peripheral oedema and rales) at admission, kidney dysfunction (BUN), anaemia, and HIV positivity. Discrimination was low for all models, similar to models for European and North American patients, suggesting that the main factors contributing to adverse outcomes are still unknown.

CONCLUSION:

Despite the differences in age and disease characteristics, the main predictors for 6 months mortality and combined 60 days re-admission and death are largely similar in sub-Saharan Africa as in the rest of the world, with some exceptions such as the association of the HIV status with mortality.