A multicenter brazilian cohort to optimize heart failure treatment using an organized multidisciplinary approach - Optimize Brazil

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Topic(s):
Chronic Heart Failure – Epidemiology, Prognosis, Outcome

Citation:
Introduction: Heart Failure (HF) is a major health problem worldwide, with elevated proportion of deaths and hospitalizations. In Brazil, a national prospective registry demonstrated an even higher rate of death and re-hospitalizations. The treatment is challenging and requires a multidisciplinary initiative to improve pharmacological and non-pharmacological treatment in this population. This comprehensive multidisciplinary approach is the main goal of the Optimize Program and is focused beyond the pharmacological treatment in educating patients and their families about the disease and providing information for self-monitoring.

Purpose: We aimed at assessing the clinical effect of Optimize-HF Program in a prospective multicenter Brazilian cohort of heart failure patients.

Methods: We prospectively included a total of 288 patients (pts) (180 males, 61.07±12.5 y.o.) with heart failure and reduced left ventricular ejection fraction (LVEF) mainly with non-ischemic etiology (178 pts – 61.8%). Pts were followed in HF clinics of six Brazilian centers and received the orientations of the Optimize program.

Results: The baseline characteristics were: LVEF = 33.7±12.2%, EDLV = 65.7±10.5mm, ESLV = 55.2±10.6mm, systolic arterial pressure = 114.9±22 mmHg, heart rate = 77.9±20.4 bpm, 37.8% of the patients were in NYHA functional class II and 58.7% of the patients were in NYHA functional class III and IV, 31.8% had atrial fibrillation/flutter, 54.9% had hypertension, 31.9% diabetes mellitus, 35.4% smoking, 18.4% obesity, 7.98% had implantable cardioverter defibrillator or cardiac resynchronization therapy. Patients were treated following the recommendations of the guidelines: 93.4% were using betablockers, 78.1% ACE inhibitors or ARBs, 70.8% ARMs, 2.1% ARNI, 18.4% digoxin, 91.7% diuretics, 28.5% warfarin, 23.6% amiodarone, 11.1% nitrate/hydralazine, and 12.9% ivabradine. The follow-up time was 158,7±131,2 days, with 9.7% of mortality and 20.5% of rehospitalization. The low mean LVEF and the worse functional class (NYHA III-IV) suggest that this is a high risk HF population. The outcome rate of death and a combined outcome of death or rehospitalization were markedly lower in comparison to the Brazilian National Registry of HF, which showed more than 42% of mortality and rehospitalization over 6 months.

Conclusion: The optimization of HF treatment using a multidisciplinary program showed a lower rate of death and death or rehospitalization. These results suggest the potential benefit of this strategy to improve prognosis of patients with heart failure and reduced LVEF.
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[Graph: Kaplan-Meier Death or ReHospitalization estimate]