## Letter to the Editor



## Therapeutic Adherence and Functional Capacity in Heart Failure

Márcia Maria Carneiro Oliveira, Elieusa e Silva Sampaio, Roque Aras Júnior

Universidade Federal da Bahia – UFBA, Salvador, BA – Brazil

## Dear Editor,

Heart failure (HF) has become a major public health problem, as it is the final pathway of most heart diseases<sup>1</sup>. One of the main factors that lead to decompensation in HF is poor patient adherence to treatment<sup>2</sup>.

Educational intervention programs for the management of chronic disease and clinical monitoring of HF are associated with better adherence to treatment<sup>3,4</sup>. It was observed, in a non-controlled clinical trial with 25 patients in a HF outpatient clinic, that the educational intervention improved the following indicators: renal function assessment with improved estimated glomerular filtration rate (eGFR; median: V0 = 61 vs. V1 = 68) and B-type natriuretic peptide (BNP), treatment adherence score and functional

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Mailing Address: Márcia Maria Carneiro Oliveira

Programa de Pós-Graduação em Medicina e Saúde da Universidade Federal da Bahia. Rua Acajutiba, Quadra 8, Lote 13 B, Pernambués. Postal Code 41120-700, Salvador, BA – Brazil E-mail: marcianinhas@vahoo.com.br

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capacity at the six-minute walk test (6MWT). The treatment adherence questionnaire assessed the following: correct use of medications, daily weight, salt and fluid restriction, alcohol intake and attendance at appointments and tests. The adherence score can range from zero to 10 points4. At the adherence assessment, an improvement was observed comparing the pre (V0) and post (V1) intervention periods, with a median of V0 = 5.0 vs. V1 = 6.1 (p = 0.006).It was demonstrated that in V0, the patients considered non-adherent sought the emergency service in the last 30 days more often than those considered adherent (p = 0.013) and in V1, 100% of patients reported not having sought the emergency service during the period. After the educational intervention, patients with systolic HF with low left ventricular ejection fraction (LVEF  $\leq 40\%$ ) showed improved adherence score (p = 0.006) and clinical improvement with a decrease in functional class (FC) and weight (p = 0.022). As for the 6MWT, the patients that showed better performance in the test were those considered adherent to treatment, with FC III, time of HF = 12-16 years, LVEF of 24 to 29%, and hypertensive etiology. Clinical and renal function improvement was observed in outpatients with heart failure submitted to educational intervention that showed greater adherence to optimized therapy.

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