

Heart failure inpatient's self-care behaviour: multicenter approach focusing on gender differences

Delgado BM.¹; Lopes IVO¹; Mendes E.²; Loureiro MARIA³; Preto L.²; Sousa LUIS⁴; Novo ANDRÉ²

¹Hospital Center of Porto, Porto, Portugal

²Polytechnic Institute of Braganca, Braganca, Portugal

³University Hospitals of Coimbra, Coimbra, Portugal

⁴Escola Superior de Enfermagem São João de Deus , Évora, Portugal

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Introduction: Heart failure is often characterized by low exercise capacity and great impairment on performance in activities of daily living. The correct management of the disease can prevent the worsening of symptoms and promote a better quality of life. Self-care behaviour plays an important role on patient's quality of life.

Aim: The aims of this study are to evaluate the self-care behaviour in a sample of heart failure inpatients, using the Self-Care Heart Failure Index (SCHFI) and to understand whether gender and pathophysiologic characteristics does interfere on it.

Methods: Cross-sectional multicenter study enrolling 225 heart failure inpatients from eight hospitals. At admission, patient's functional capacity was evaluated as well as their self-care behaviour, using the SCHFI Portuguese v6.2. Comparison between self-care behaviour with gender was performed. Also some correlations were performed with the total sample of patients, aiming to understand which were the variables that may interfere with the score of each sub-scale of the self-care HF index.

Results: Patients' mean age was 68.4 ± 10.7 years old, 68% were male and 82.3% have reduced ejection fraction. A mean value of 47.9, 35.6 and 38.8 points was found in the SCHFI score of the sections self-care maintenance (SCMt), self-care management (SCMg) and self-care confidence (SCC), respectively. Heart failure inpatients present inadequate levels of self-care behaviour. No difference was found between genders on any section of the SCHFI. Among all variables, only the number of CVRFs and the left ventricular ejection fraction had significant differences. Males had better results, but not with a statistically significant difference. Association tests (ANOVA) between different variables and the score of each section of the SCHFI were performed. Only in the NYHA there are variables associated with a better self-care, namely in the SCMg ($p = 0.011$) and in SCC ($p = 0.010$). Correlations were made using the numeric variables age, CVRF, BI, LCADL, SCMt, SCMg and SCC, in order to understand the influence of the variables with each other. All the three dimensions present a positive correlation, at 99% confidence interval between them (SCMt with SCMg: $r = 0.365$, $p < 0.000$; SCMt with SCC: $r = 0.272$, $p < 0.000$ and SCMg with SCC: $r = 0.670$, $p < 0.000$). In addition, SCMt presents a positive correlation with age at a 95% confidence interval ($r = 0.158$, $p = 0.018$). Negative correlations were found between 1) BI and age ($r = -0.151$, $p = 0.023$), at a 95% confidence interval and 2) BI with LCADL ($r = -0.407$, $p < 0.000$), at a 99% confidence interval. Regarding NYHA functional class and left ventricular systolic function, only NYHA class II patients present a statistically significant difference in SCMg and SCC comparing to Class III and IV patients (who do not present differences between them).

Conclusion: The results do not suggest a relationship between gender and pathophysiological characteristics with self-care behaviour.