

Heart failure inpatient's self-care behavior: multicentre approach focusing on gender differences

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NO conflict to declare

1. INTRODUCTION

Heart failure is a chronic complex syndrome. The correct management of the disease can prevent the worsening of symptoms and promote a better quality of life. Self-care behavior plays an important role on patient's quality of life and includes the maintenance of specific care like weight surveillance, physical activity, salt intake, among others; the management of strategies to control an unexcepted decompensation and finally the confidence in the health care team and in the capacity of the patient to care of himself.

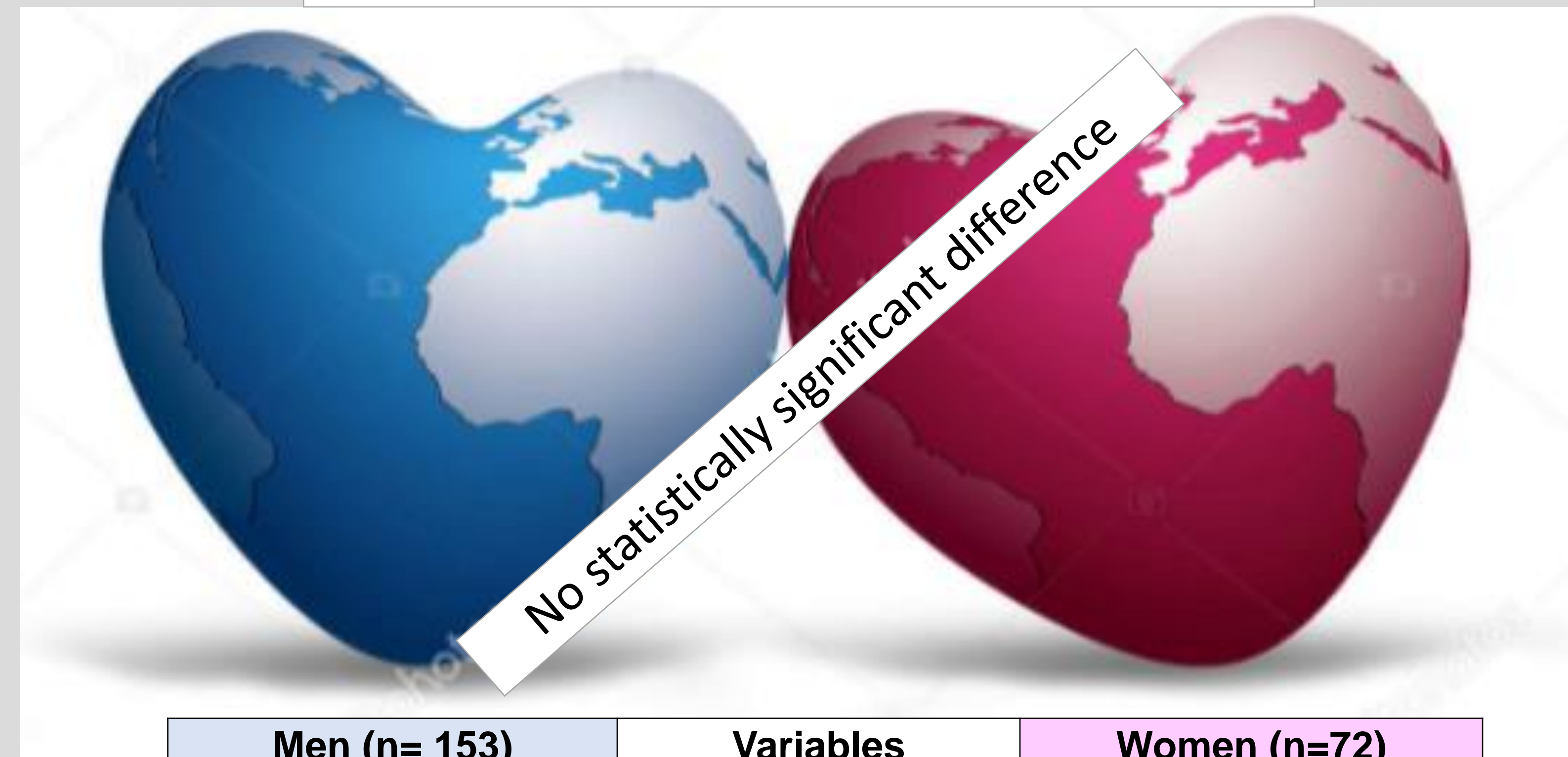
2. PURPOSE

The aims of this study are to evaluate the self-care behavior 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.

3. METHODS

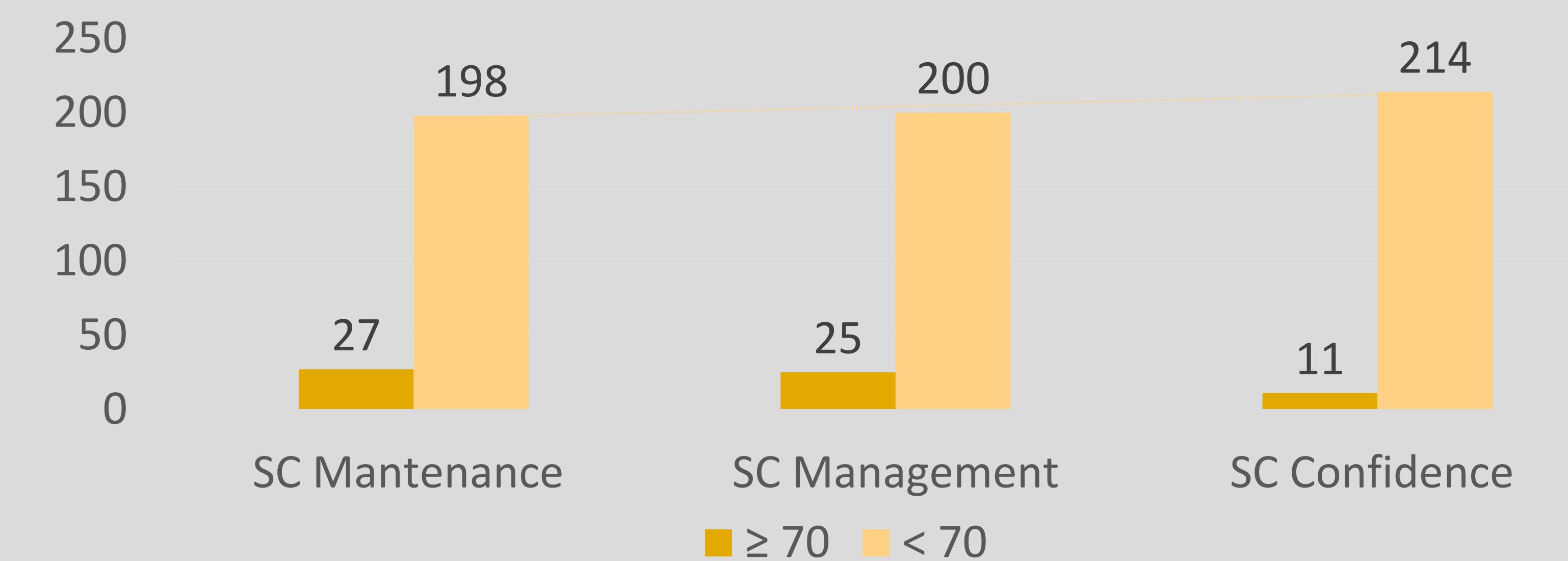
Cross-sectional multicenter study enrolling 225 heart failure inpatients from eight hospitals. At admission, patient's functional capacity was evaluated as well as their self-care behavior, using the SCHFI Portuguese v6.2. Comparison between self-care behavior with gender was performed. Also some correlations 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.

4. RESULTS



| Men (n= 153) Mean ± SD | Variables p value | Women (n=72) Mean ± SD |
|-------------------------------|---------------------------|---------------------------|
| 68.4 ± 10.3 | Age (years) 0.95 | 68.3 ± 11.3 |
| 77 ± 19 | Barthel Index 0.367 | 73.8 ± 21.6 |
| 28 ± 9 | London Chest ADL 0.079 | 30.4 ± 9.3 |
| Self-care Heart Failure Index | | |
| 47.1 | SC Maintenance 0.30 | 49.6 |
| 36.2 | SC Management 0.52 | 34.1 |
| 39.3 | SC Confidence 0.62 | 37.5 |

Graph 1 – Number of patients regarding the self-care behavior level



All the three sub-scales present a positive correlation, at 99% confidence interval between them ($p < 0.000$). In addition, SC Management 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 LCALD ($r = -0.407$, $p < 0.000$), at a 99% confidence interval.

Self-care Heart Failure Index

Three sub-scales, each one with a score. A value of ≥ 70 points represent an adequate self-care behavior.

Validated instrument to measure the level of self-care behavior.

Self-care maintenance

Surveillances like ankles, weight, physical activity, salt intake and medication

Self-care management

Signs and symptoms and measures implemented by patients to stabilize

Self-care confidence

Level of confidence about the recognition of decompensation and capacity to deal with the disease

Most of the patients (82.3%) have reduced ejection fraction, being the valvular disease the most prevalent etiology. Patients were mainly in NYHA III class (78%) and were significantly decompensated at admission.

In general patients present an **inadequate** level of self-care behavior (Graph 1). These results are in line with the evidence regarding other countries.

An ANOVA test comparing the sections of the SCHFI regarding different pathophysiologic characteristics showed that NYHA II class patients present better SC Management ($p = 0.011$) and SC Confidence ($p = 0.010$) comparing to class III and IV.

5. CONCLUSIONS | In this sample of patients, Gender do not interfere in the level of self-care behavior. Regarding pathophysiological characteristics, it seems that age favors the level of management and NYHA class the management and confidence. There is an inadequate level of self-care that must be improved by promoting patient's empowerment.