

# Gender and age related differences in patients hospitalized for acutely decompensated heart failure: single centre results

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**Goal:** To provide a real-life single centre overview of hospitalized patients with acutely decompensated heart failure (ADHF), evaluating differences and similarities according to age and gender, analyzing the clinical profile, management and outcome.

**Patients and Methods:** The study population consisted of the patients (1,820), enrolled in Department of Cardiovascular Diseases, Clinical Hospital Center Rijeka, from June 2006 to June 2012. Differences were assessed in men and women according to four age groups (I. <64, II. 65-74, III. 75-84, IV. 85 years).

**Results:** In all patient groups there were 51% women. The mean age of all groups was 75.1±10.1 years. The age of patients that were released alive was 74.7±10.1. 44% of the patients were 75-84 years old, 14 % <64 years old, while 16% were 85 years old. In all patient groups there were 71% of women in the group 85 years old, while 75% of men in the group <64 years old. 80% of men (I.) and 70% of women (IV.) had coronary heart disease. 72% of men (I.) and 76% of women (IV.) had treated hypertension. 71% of men

(I.) and 67% of women (IV.) had diabetes mellitus. 79% of men (I.) and 74% of women (IV.) had chronic obstructive pulmonary disease, 86% of men (I.) and 69% of women (IV.) had atrial fibrillation. 74% of men (I.) and 80% of women (IV.) were treated with angiotensin-converting-enzyme inhibitors or angiotensin receptor blockers. 74% of men (I.) and 74% of women (IV.) were treated with beta-blockers. 77% of men (I.) and 76% of women (IV.) were treated with aldosterone antagonists. Median length of hospital stay was 9.9±17.9 days. Mean age of deceased ones was 77.3±9.9 years; 80,3±7,4 in women and 73,7±11,4 in men. In-hospital mortality was 8.6% among women and 7.1% among men.

**Conclusion:** The clinical characteristics of ADHF differ considerably with age and gender. In our centre, during the above mentioned period there were more women with ADHF and they were older, with higher rate of coronary heart disease, treated hypertension, diabetes mellitus, chronic obstructive pulmonary disease and atrial fibrillation in „older elderly“ group 85 years old, compared to men. Angiotensin-converting-enzyme inhibitors or angiotensin receptor blockers, beta-blockers and aldosterone antagonists were mostly prescribed in men 64 years old, also in women 85 years old. Deceased women were older than men.

**KEYWORDS:** age, gender, heart failure.

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## Literature

1. Pina IL. A better survival for women with heart failure? It's not so simple. *J Am Coll Cardiol.* 2003; 42: 2135-8.
2. Adams KF, Dunlap SH, Sueta CA, et al. Relation between gender, etiology and survival in patients with symptomatic heart failure. *J Am Coll Cardiol.* 1996;28:1781-8.
3. Levy D, Kenchaiah S, Larson MG, et al. Long-term trends in the incidence of and survival with heart failure. *N Engl J Med.* 2002;347:1397-402.