National trends in heart failure hospitalization and mortality in Slovenia

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GOAL: Hospitalization rate and mortality in patients with heart failure (HF) in Western Europe and USA is decreasing, while little is known about trends in Central and Eastern Europe.¹⁻³ We aimed to evaluate HF hospitalization and mortality trends in Slovenia.

PATIENTS AND METHODS: Slovenian national hospital discharge registry was used to identify patients with HF hospitalized between 2004 and 2012. In subjects without HF hospitalization during 2004 to 2008, HF related admission in period 2008 to 2012 was considered as first HF hospitalization. Survival status was retrieved from Central population registry. We calculated annual hospitalization rates and mortality rates per 100 000 inhabitants.

RESULTS: Overall, 157,695 hospitalizations in 80,180 subjects (76±12 years, 52% women, 5±3 comorbidities) were identified. Arterial hypertension, atrial fibrillation, diabetes mellitus and ischemic heart disease were recorded in 51%, 35%, 25% and 20% patients, respectively. Over time there were 25%, 24% and 4% increase in main, any or first HF hospitalization rate. Non-significant decrease in standardized mortality rate per 100,000 inhabitants at 30 days (152 to 150, p=0.41) and at 1 year (297 to 284, p=0.27) was observed. Proportion of hospitalized patients who died at 30 days and 1 year increased or remained stable. For those first hospitalized with HF, mortality rate reductions at 30 days (80 to 67, p=0.017) and 1 year (128 to 105, p=0.011) were significant. In Cox models of proportional hazard, increased mortality at 1 year or at the end of follow-up was independently predicted by male sex, age, chronic obstructive pulmonary disease, ischaemic heart disease, and cancer (p<0.001 for all).

CONCLUSIONS: National based study demonstrated constant increase in HF hospitalization rates, mainly due to rehospitalizations. Mortality rate after discharge with HF remains high, with little change in proportion of deceased patients at 30 days and 1 year.

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LITERATURE

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