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#### **Sibling risk of hospitalization for heart failure - a nationwide study**

*Magnus Lindgren(1), JG Smith(2,3), X Li(1), J Sundquist(1,4), K Sundquist(1,4), B Zöller(1)*

*(1) CPF, Lund University and Region Skåne, Malmö, Sweden*

*(2) Molecular Epidemiology and Cardiology, Lund University, Lund, Sweden*

*(3) Broad Institute of Harvard and MIT, Cambridge, USA*

*(4) Stanford Prevention Research Center, Stanford University, Palo Alto, USA*

*Corresponding author: Dr Magnus Lindgren, Lund University And Region Skåne, Center for Primary Health Care Research, Malmö, Sweden. E-mail: magnus.lindgren@med.lu.se*

**Background & Aim:** The familial risks of heart failure (HF) remain largely undetermined. This nationwide follow-up study was aimed at determining risk of hospitalization for HF conferred by affected siblings. **Method:** Swedish Multi-generation Register data, with records of at least one full sibling available at start of follow-up, were linked to the Hospital Discharge Register data for 1987-2010. The oldest participants were aged 78 years in 2010. Relative risks, expressed as standardized incidence ratios (SIRs), of HF hospitalization were calculated for individuals with siblings hospitalized with HF compared with those whose siblings who were not. Adjustments were made for common HF comorbidities, age, time period, socioeconomic status and region.

**Results:** During the 23 year follow-up (1987-2010) 23 212 individuals (7 155 females), were hospitalized because of HF. From this total 1121 had at least one full sibling hospitalized for HF. Sibling risks were generally similar for both males and females. The SIR of HF hospitalization was 1.62 (95% confidence interval 1.54-1.70) for individuals with one affected sibling and 15.46 (12.82-18.50) for individuals with two affected siblings. The SIR conferred by one or more affected siblings was 2.67 (2.24-3.16) below the age of 50 years, 1.92 (1.75-2.10) between 50 and 59 years of age, 1.63 (1.52-1.76) between 60 and 69 years of age, and 1.54 (1.38-1.71) between 70 and 78 years of age. Spouses had low familial risks, SIR=1.04 (1.03-1.06).

**Conclusions:** Familial factors are important in HF, especially in families with two or more affected siblings and in early onset of HF.