

Low socioeconomic status (SES) is associated with recurrent ASCVD in stable coronary heart disease

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# Declaration of Interest

- I have nothing to declare

### **Background**

- The risk of a recurrent cardiovascular event varies in patients with CHD.
- Established risk prediction tools are lacking.
   No risk stratification method for post myocardial infarction (MI) patients.
- With improved risk stratification in secondary prevention, new potent (expensive) medication could be aimed at the patients at highest risk of recurrence
- The predictive role of SES in secondary prevention post MI is unclear





#### **Declaration of Interest**

No conflict of interest to declare





## Purpose and key points about methods

To investigate the predictive value of SES variables on incident ASCVD in 1-year survivors of a first MI

**SWEDEHEART** 

Nationwide secondary prevention quality registry for

**SEPHIA** 

patients <75 years with standardized follow-up after MI

Study cohort

n = 29,226 All without prior ASCVD, 2006 - 2014

1-year follow-up (baseline)



#### LISA longitudinal database (Statistics Sweden)

Disposable Income (Quintiles)

SES variables - Level of Education (≥9, 10-12, >12 years)

Marital Status (married, not married, divorced, widow)

In-patient Care Diagnoses & Cause of Death registries (National Board of Health and Welfare)

Outcome - ASCVD (MI, CHD death, fatal or nonfatal stroke)



#### Results

n = 29,226 mean age 63.1 years, 27% women Incident ASCVD 2,284 (7.8%) during 4.1 year mean follow-up.

	Model I SES variables, age, sex HR (95% CI)	Model II SES variables, age, sex, ‡ HR (95% CI)	Model III  Model II without DISP INC  HR (95% CI)
Marital Status  Divorced (ref: married)	1.17 (1.05-1.30)	1.11 (1.00-1.24)	1.16 (1.04-1.29)
Level of Education >12 years (ref: ≤9 years)	0.85 (0.75-0.97)	0.92 (0.81-1.05)	0.87 (0.76-0.98)
Disposable Income Q1 (ref) Q2 Q3 Q4 Q5 (highest)		105 06 07 08 09 1	n/a



#### Conclusions

- In this large and representative population of 1-year survivors after a first MI, SES predicts subsequent ASCVD.
- SES should be considered in risk assessment for secondary prevention post MI.
- The strongest association was observed for Disposable Income, however, Marital Status and Level of Education are relevant predictors in absence of income data.

