Return to work in patients with coronary heart disease: results from the EUROASPIRE IV study

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CHD & Sustainable employability

Prolonging working life
= avoiding premature dropout & long-term sickness absence

“Cardiovascular disorders constitute a major burden for health of working populations throughout the world with as much as 50% of all causes of death and at least 25% of work disability.“
More insight is needed into the factors associated with return to work in patients with CHD

Aim = to investigate return to work in patients with CHD within the EUROASPIRE IV study, and the association with their risk factor profile and health-related quality of life (HRQoL)
EUROASPIRE IV study

*European Action on Secondary Prevention through Intervention to Reduce Events:*

4th wave in 2012-2013 in 24 countries

→ N = 7,998 patients 18-80 yr with documented CHD (CABG, PCI, AMI, Ischemia)

- Data collection in standardized way by trained research staff
- Baseline information from medical records (retrospective)
- Interview / clinical examination 6 months to 3 year after event
EUROASPIRE I 1995-1996 in 9 geographical regions

EUROASPIRE II 1999-2000 in 15 geographical regions

EUROASPIRE III 2006-2007 in 22 geographical regions

EUROASPIRE IV 2012-2013 in 24 geographical regions

EUROASPIRE V 2016-2018 in 26 geographical regions

1994 FIRST JOINT TASK FORCE GUIDELINES

1998 SECOND JOINT TASK FORCE GUIDELINES

2003 THIRD JOINT TASK FORCE GUIDELINES

2007 FOURTH JOINT TASK FORCE GUIDELINES

2012 FIFTH JOINT TASK FORCE GUIDELINES

2016 SIXTH JOINT TASK FORCE GUIDELINES

2016 SIXTH JOINT TASK FORCE GUIDELINES
EUROASPIRE IV countries

Ireland  Netherlands  Germany  UK  France
Czech Republic  Belgium  Croatia  Spain
Slovenia  Serbia  Bosnia Herzegovina  Finland  Russia
Latvia  Sweden
Poland  Lithuania  Romania  Bulgaria
Turkey  Greece  Cyprus  Ukraine
Information collected at interview

- Personal and demographic information
- Medical history
- Reported lifestyle changes and risk factor management
- Height, weight, waist circumference, blood pressure, cholesterol, plasma glucose, HbA1c
  → clinical risk factor targets based on European guidelines for cardiovascular prevention
- HRQoL: Hospital Anxiety and Depression Scale (HADS), EuroQol Visual Analogue Scale (EQ-VAS)

Your own health state today

Worst imaginable health state

Best imaginable health state
Return to work in EUROASPIRE IV

Mean age 57.8 yr (SD 8.4)  
75% < 63yr

- Not employed before index event
- Employed before index event
- Missing data

Did not return to work after index event
Returned to work after index event

- 0
- 10
- 20
- 30
- 40
- 50
- 60
- 70
- 80

3278
4668
Predictors of return to work*

* Results from multiple logistic regression analysis (mutually adjusted)
Predictors of return to work*

Results from multiple logistic regression analysis (adjusted for age, sex & education)

* OR

0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.1

diabetes

raised Hba1c level in diabetics
Predictors of return to work*

* Results from multiple logistic regression analysis (adjusted for age, sex & education)
Predictors of return to work*

* Results from multiple logistic regression analysis (adjusted for age, sex & education)
Predictors of return to work*

* Results from multiple logistic regression analysis (adjusted for age, sex & education)
NOT related with return to work:

- Recruiting diagnosis
- Clinical risk factor targets:
  - raised total / LDL cholesterol
  - raised blood pressure
  - raised glucose in diabetics
- Cardiac rehabilitation (attending at least ½ of the sessions)
Discussion and Conclusions

- Limitation: cross-sectional design

- In general, patients returning to work after a coronary event had a more favorable lifestyle related risk profile, but no associations were found with clinical risk factors

→ findings suggest that optimal disease management regarding smoking cessation, physical exercise and body weight is beneficial for return to work after CHD

- Most likely: bidirectional relation between RTW & HRQoL

- Particular attention should go out to reintegration of patients with diabetes
Thank you!

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