UNIVERSITY OF LUXEMBOURG
Integrative Research Unit on Social and Individual Development (INSIDE)

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Why medication or tobacco consumption enhance life satisfaction of cardiovascular patients?

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Background

- Monitoring of LS is a key element of the social progress of Europeans (Eurofound, 2013)

- LS of patients may be related to:
  - incidents of cardiovascular diseases
  - risk factors
  - unhealthy behaviours
  - socioeconomic conditions

- Their respective influence remains unclear

Eurofound (2013). *Quality of life in Europe: Subjective well-being*. Luxembourg: Publications Office of the European Union. ISBN 978-92-8971-120-3.

Aim

- To analyse LS and its relationships with cardiovascular risk factors and unhealthy behaviours

Methods

- Design

  Retrospective health record audit of the Luxembourgish National Institute of Cardiac Surgery and Cardiological Intervention (INCCI)

- Inclusion criteria

  All patients who underwent coronary angiography in 2008-2009

- Procedure

  5 years after, self-administered questionnaire

- Data analysis

  Multiple regression including interaction effects

Variables

- LS [1-10] (DV)
- CV disease incidence
  - Bypass surgery, myocardial infarction, angina pectoris
- CV risk factors
  - Diabetes, Hypertension, Hypercholesterolemia
  - Weight & height (for calculating BMI)
- Unhealthy behaviours
  - Tobacco consumption
  - Physical inactivity
  - Eating habits

  } + Change over 5 years
- Socioeconomic characteristics

Characteristics of the participants

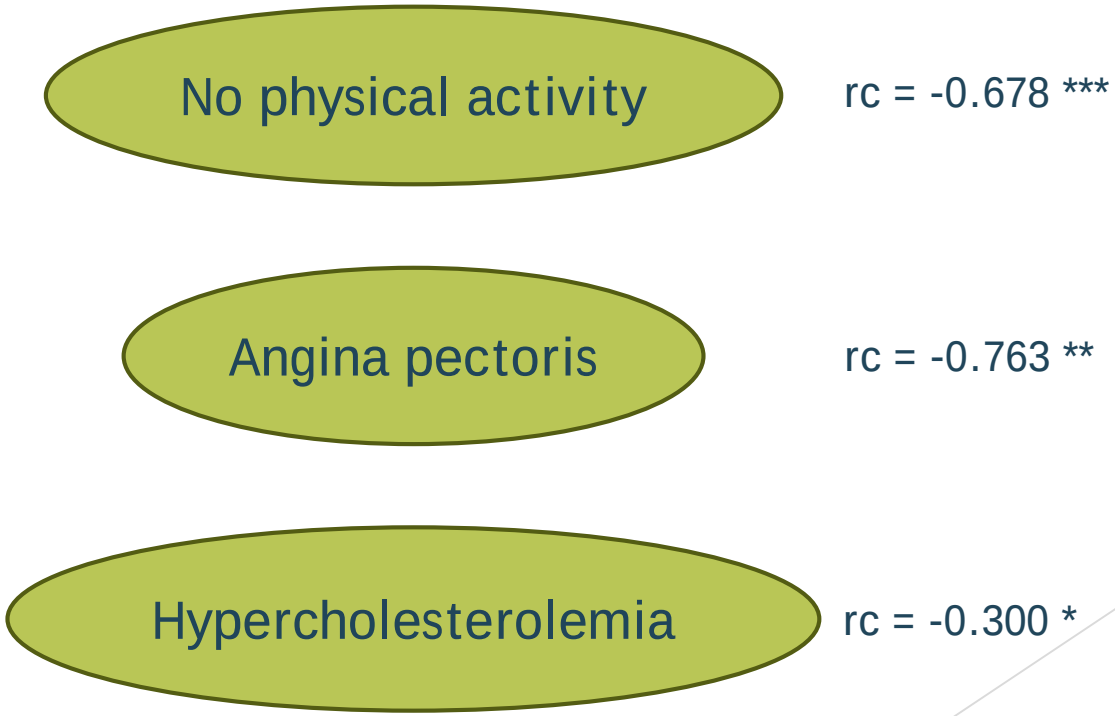
- n = 1289 (response rate 35.5%)
- Aged 69.2 years (± 11.1)
- 71.3 % men
- 74 % live in a couple
- 78.1 % retired
- 68.9 % secondary or higher education level
- 33.9 % income < 36 000 € /year

Descriptive results

LS [1;10]		m = 7.3 (± 2.1)	
Incidence of CV disease over 5 previous years	Bypass surgery	Yes	21 %
	Myocardial infarction	Yes	12 %
	Angina pectoris	Yes	11 %
CV risk factors	Hypercholesterolemia	Yes	48 %
	Hypertension	Yes	43 %
	Diabetes	Yes	29 %
	BMI	Normal	24 %
		Overweight	44 %
		Obesity	32 %
Behaviours	Tobacco consumption	Yes	10 %
	Pay attention to eating habits	No	29 %
	Physical activity	No	34 %
		Occasional	24 %
		Regular	46 %

Factors related to low life satisfaction

Adjusted on age, sex, income and all CV risk factors



Interactions and life satisfaction

Adjusted on age, sex, income and all CV risk factors

Life satisfaction [1-10]		Estimate
Tobacco cons. x hypercholesterolemia	Smoker-Yes	0.958 *
Hypertension x hypercholesterolemia	Yes-Yes	0.698 *
Physical act. x hypercholesterolemia	No-Yes Occasional-Yes Regular–Yes	-0.603 * -0.244 * -0.000 *
Tobacco cons. x attention to eating habits	Smoker-Yes	1.052 *

Interaction effects and LS

- **Hypercholesterolemia x smoking** → high LS
  Hyp. Patients with no intention to change may feel unconcerned. Attitude is in coherence with behaviour; "*disinclined abstainers"*?(Godin)

- **Hypercholesterolemia x low physical activity** → low LS
  *Hyp. P*atients may intend to change, but abstain from acting.

- **Smoking x paying attention to eating habits** → high LS
  Hyp. Patients know the risks of unhealthy behaviours and try to change it by being active. "*Inclined actors*"?

- **Hypercholesterolemia x hypertension** → high LS
  Hyp. Adapted care and treatment?

Implications

- Importance of treating biological risk factors
  - Medication
- Necessity to take behaviour change into account in the cardiac context
- Implementation of motivational interviewing groups

Thank you.

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