

Social inequalities in Healthy Life Years by region in Belgium

Inégalités sociales en espérance de vie sans incapacité par région en Belgique

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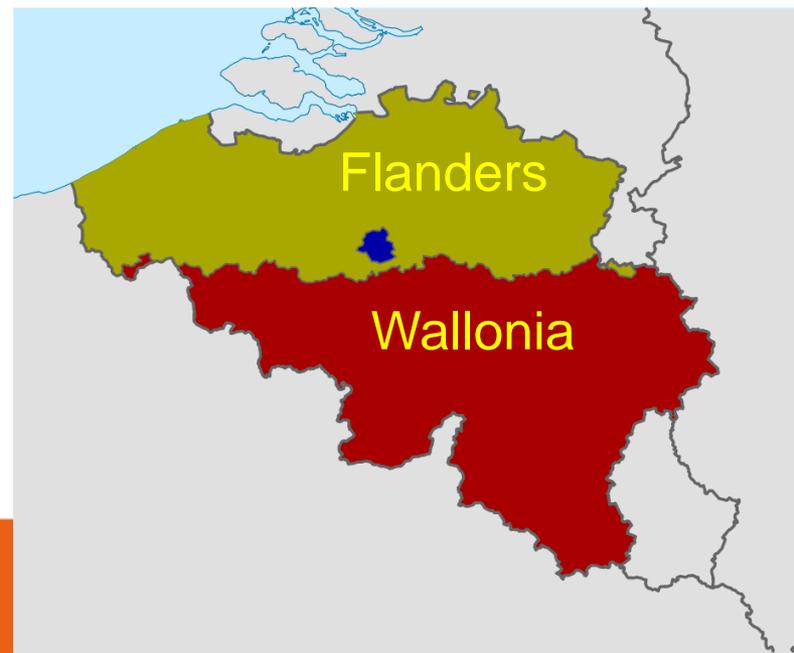
Definitions

- Health Expectancies are an extension of Life Expectancy
- Health Expectancies (HE) express the number of remaining years that a person can expect to spend in a health state at a particular age, assuming current rates of mortality and morbidity.
- Generic term referring to an entire class of indicators:
 - **Healthy Life Years (HLY):** long-term health related activity limitations
 - Healthy Life Expectancy: self-rated health
 - Dementia-free Life Expectancy: Dementia

Belgium : Institutional Profile

- Federal State: social security, tax, health system (curative health services)
- Communities/regions: education, health prevention and promotion

=>Regional health statistics do matter in Belgium



Past research on HLY in Belgium

- Educational inequalities in HLY are not static over time at national level
- Regional differences in HLY are significant
- Difference in educational inequalities in HLY between the regions were estimated to be small in the 1990s

Research Questions

- 1) How big are educational inequalities in Healthy Life Years in the regions of Belgium in the 2000s?
- 2) Does the size of educational inequalities in HLY vary by region in the 2000s?

Data: Mortality by Socio-economic Status (SES)



- Gold standard: Mortality follow-up of census using a unique identifier
 - Absence of census in the future
- Alternative: mortality follow-up of national surveys
 - individual linkage to the National Register (Charafeddine et al. 2011)
- Health Interview Survey (HIS) 2001
 - Follow-up of participants until 31 DEC 2010 (approx. 9 years)
 - 12 770 individuals initially, 12 436 matched (97.4%)
 - N Final=10 758

Data



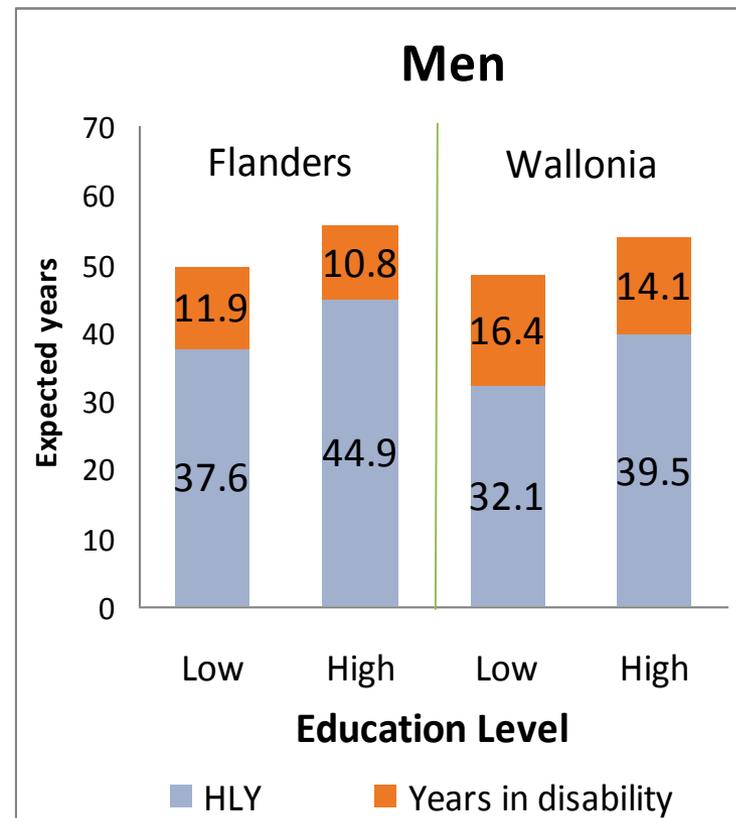
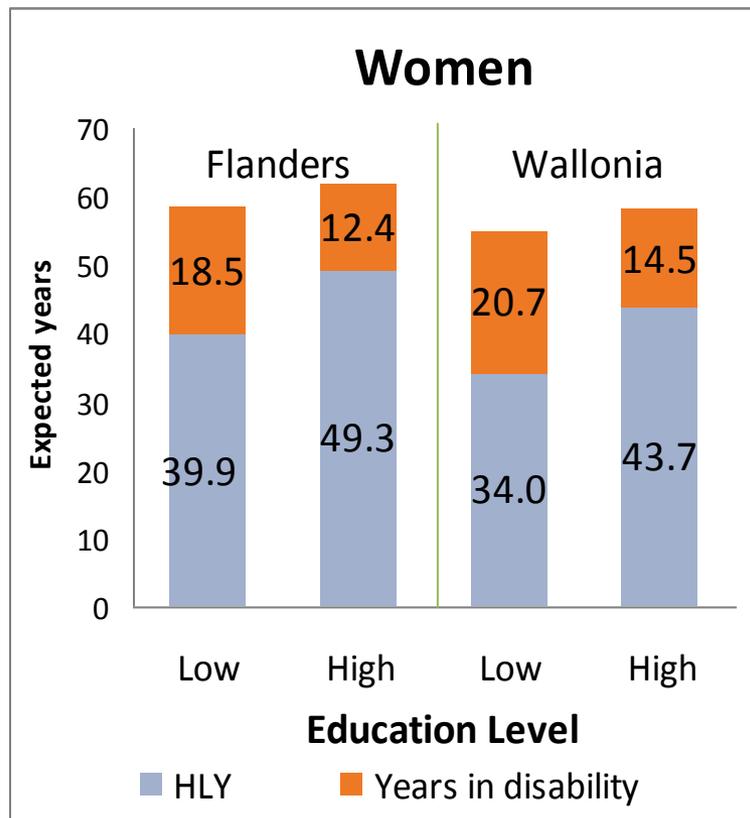
- **SES variable**
 - Highest educational level in the household:
 - *Low education*: no diploma, primary education, lower secondary education
 - *High education*: higher secondary education, tertiary education

- **Health outcome (HIS 2001):**
 - Global Activity Limitation Indicator (GALI)
 - “For at least the last 6 months, have you been limited because of a health problem in activities people usually do?”
 - N Final=8920

Methods: Estimation of HLY

- Sullivan method
 - cross sectional data
 - simplicity, relative accuracy, ease of interpretation
- Calculation of standard errors
- Comparison of educational categories using z-statistics

Results: HLY and years in disability at age 25 years, HIS 2001, Belgium



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Inequalities in HLY at age 25 years, HIS 2001, Belgium

	Low education	High education	Difference in HLY	p
Women Flanders	39.88	49.32	9.44	<0.01
Women Wallonia	34.05	43.72	9.67	<0.01
Men Flanders	37.60	44.88	7.29	<0.01
Men Wallonia	32.09	39.54	7.45	<0.01

Differences in HLY inequalities
between the regions: 0.23 years in
women and 0.16 years in men

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Conclusions

- SES inequalities in HLY are substantial in the regions of Belgium.
 - Inequalities are estimated to be lower in men than in women
- At each education level, HLY are higher in Flanders than in Wallonia (for men and women) but...
- The size of SES inequalities in HLY does not differ between the regions, which corroborates previous studies

Conclusions

- A deeper understanding of the nature of these differences would be very useful information for the definition of priorities in the field of public health
- The use of decomposition techniques is suggested:
 - Decomposition of SES inequalities by type of effect:
 - Mortality effect
 - Morbidity effect
 - Decomposition of SES inequalities by cause:
 - Cause of mortality
 - Cause of morbidity

Thank you for your attention

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