

Explaining health inequality at older ages in England and Wales

Pia Wohland, Vikki O'Neill, Fiona Matthews and Carol Jagger

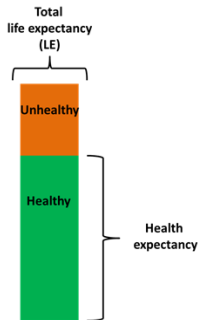
Epidemiology Research Day, Newcastle University, 29.
September

Inequalities in Healthy Active Life Expectancy: the role of time, place, person and methods

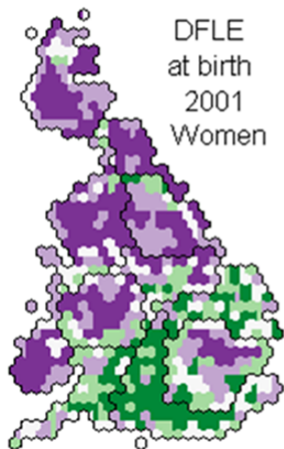


InHALE webpage:

<http://research.ncl.ac.uk/InHALE/>



We know



JECH Online First, published on June 6, 2014 as 10.1136/jech-2014-204083

Research report



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Drivers of inequality in disability-free expectancy at birth and age 85 across space and time in Great Britain

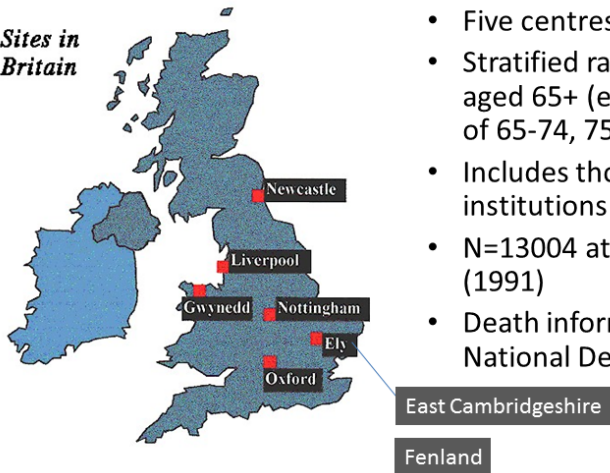
Pia Wohland,¹ Phil Rees,² Clare Gillies,³ Seraphim Alvanides,⁴ Fiona E Matthews,⁵ Vikki O'Neill,⁵ Carol Jagger¹

We want to know

- ▶ Do we find similar relationships using longitudinal data?
- ▶ Are geographical variations simply a reflection of socioeconomic status?

MRC Cognitive Function and Ageing Study (CFAS)

*Sites in
Britain*



- Five centres used
- Stratified random sample aged 65+ (equal numbers of 65-74, 75+)
- Includes those in institutions
- N=13004 at baseline (1991)
- Death information from National Death Registry

Data for this analysis

Data set contains cases with complete data on all health measures, education, social class and comorbidity

10.7% excluded (1388) more likely to be women, older and from Gwynedd

CFAS study - our data set

Health expectancies of interest here

- ▶ Disability free life expectancy (DFLE), derived from ADL/IADL
- ▶ Healthy life expectancy (HLE), derived from SRH

Factors to explore

- ▶ Education
- ▶ Social class (Manual / Non-manual worker)

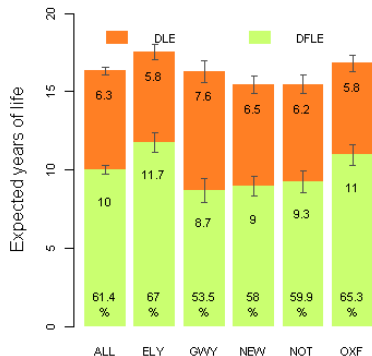
Results

Women and men at age 65

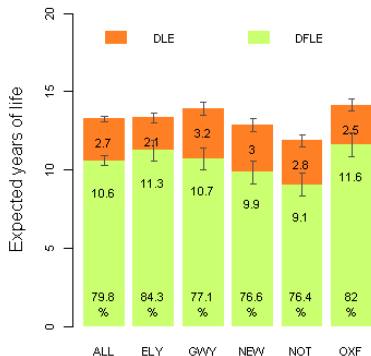
- ▶ Life years with and without an ADL/IADL limitation
- ▶ Healthy and unhealthy life years
 - ▶ By centre
 - ▶ By centre and education
 - ▶ By centre and social class

Years free and with a ADL/IADL disability

Women at 65 by centre

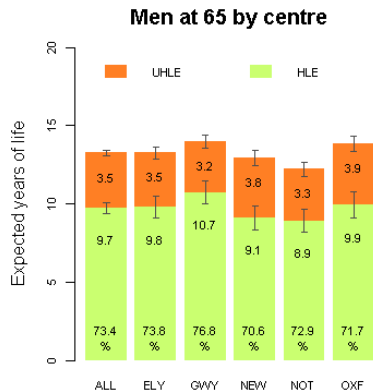
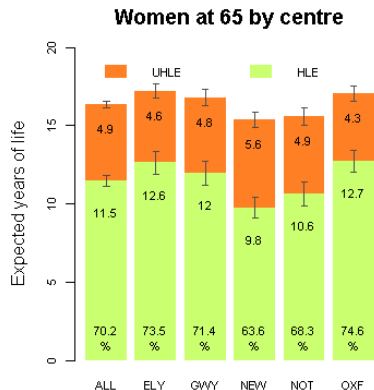


Men at 65 by centre



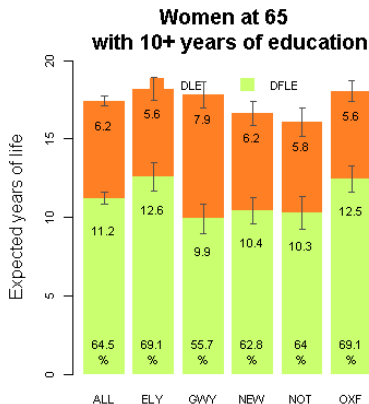
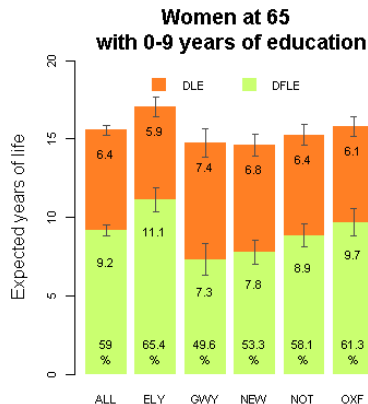
Are these differences explained by differences in educational achievement or social class?

Years lived healthy and unhealthy



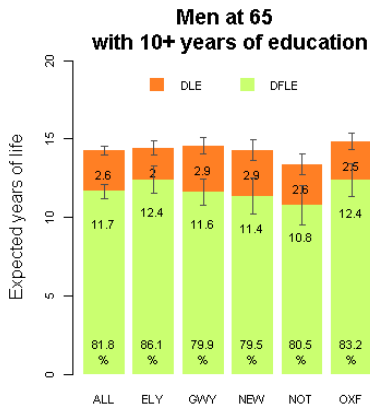
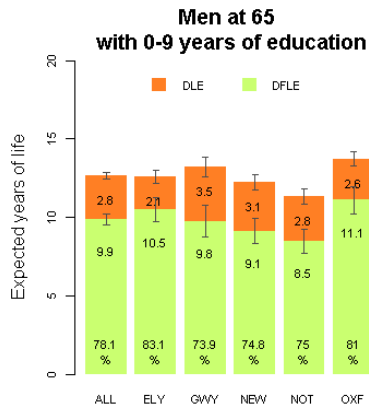
Are these differences explained by differences in educational achievement or social class?

Years free and with a ADL/IADL disability

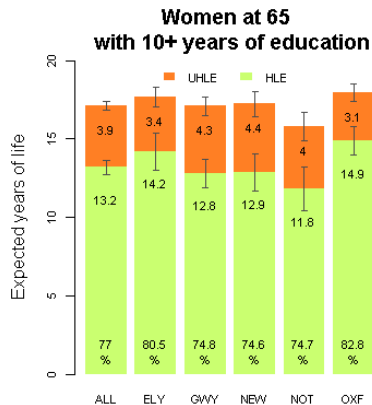
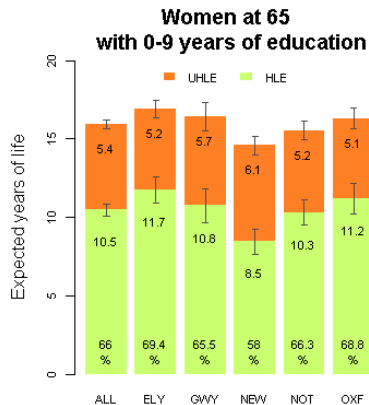


Education does not explain variation between centres. *BUT* education increases life expectancy and does not reduce time spend with a ADL/IADL.

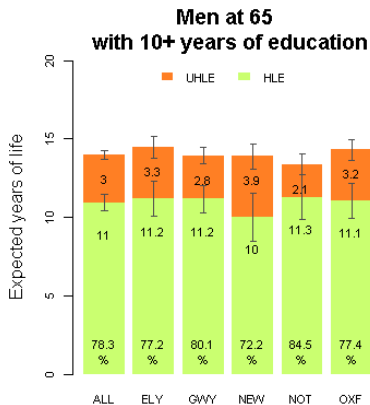
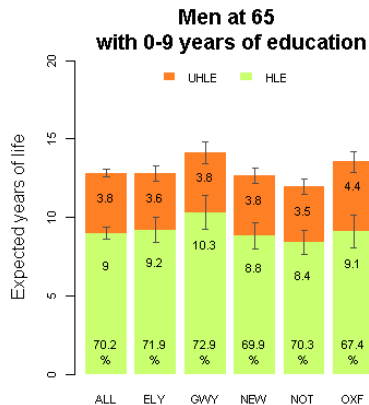
Years free and with a ADL/IADL disability



Years lived healthy and unhealthy



Years lived healthy and unhealthy



Findings, conclusion and discussion 1

Do education and/or social class explain variation between centres

| Gender | Health | 0-9 Edu | 10+ Edu | Man | Non-man |
|--------|--------|---------|---------|-----|---------|
| Women | DFLE | NO | NO | NO | NO |
| * | HLE | NO | NO | NO | NO |
| Men | DFLE | NO | YES | NO | YES |
| * | HLE | Just | YES | NO? | YES |

Findings, conclusion and discussion 1

Neither social class nor education fully explain variation in DFLE / HLE between centres for women

Men with 10+ education and non-manual workers have similar DFLE and HLE across centres

Education

increases LE

decreases time spend unhealthy

does *not* reduce time spend with ADL/IADL.

At age 65

Women spend more time with an activity limitation but less time unhealthy.

Men spend less time with activity limitation but more time unhealthy.

Findings, conclusion and discussion 2

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Unemployment rate and social class composition explained more of variation in men than in women *Similar here*

Findings, conclusion and discussion 3

Why does education not translate into the same health for women as it does for men?

Live course

Heterogenic group

Double strain

Why does DFLE/HLE vary for men with less than 10 years of education?

Region specific work conditions

Coal mining?



THANKS

The curious case of Gwynedd

Area with most time spend with activity limitation, but has comparable high HLE

Women with higher education spend more time with ADL/IADL limitation than women with less education

Men with low education have one of the highest LE in the low education group

Environment?

THANKS