



# Unequal ageing in health: theories, causes and consequences

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(based on research carried out with Ilinca, S., Schmidt, A. and Zolyomi, E.)

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# Overview of the presentation

- Inequalities in ageing: a lifecourse approach to health
- Inequalities in health among the 65+ in Europe
- Assessing health inequalities in old-age: practicalities

# Ageing and health inequalities

Intergenerational inequalities: do health inequalities increase with age?

# More unequal in old-age... Why should we?

## *Arguments against:*

- Age as the fundamental determinant of health at older age groups
- Causes of death at early age groups are particularly sensitive to socio-economic conditions: unintentional injury, suicide (Backlund et al 2007)  
→ but beware of context: US studies (homicide) and mortality among middle-aged men in former USSR
- Selective mortality or the “survival of the fittest”

# More unequal in old-age...

## Arguments in favour

*Arguments in favour:*

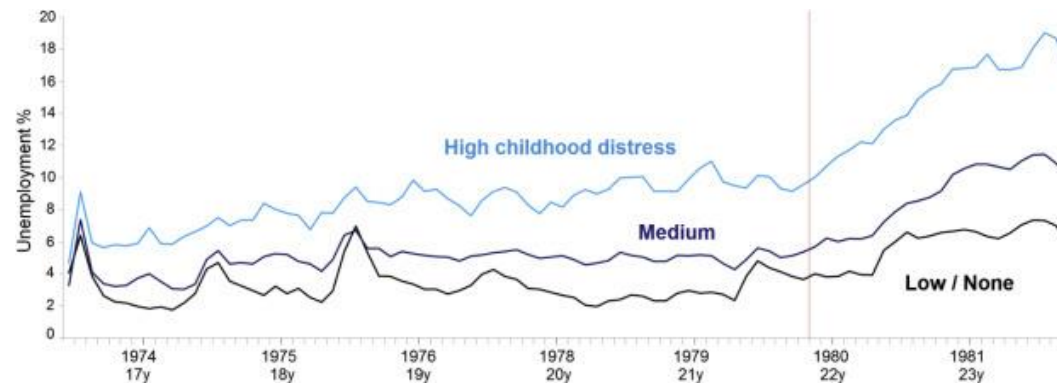
- *Age-relatedness* (Mayer et al 1999): old-age creates specific challenges
- *Comulation hypothesis*: “Nature gives you the face you have at twenty. Life shapes the face you have at thirty.” (Coco Chanel)

# Life is a path not a destination

Comulation hypothesis:

- (Dis)Advantages tend to accummulate along the life course: material, behavioral, and psychosocial factors (von dem Knesebeck, 2010)

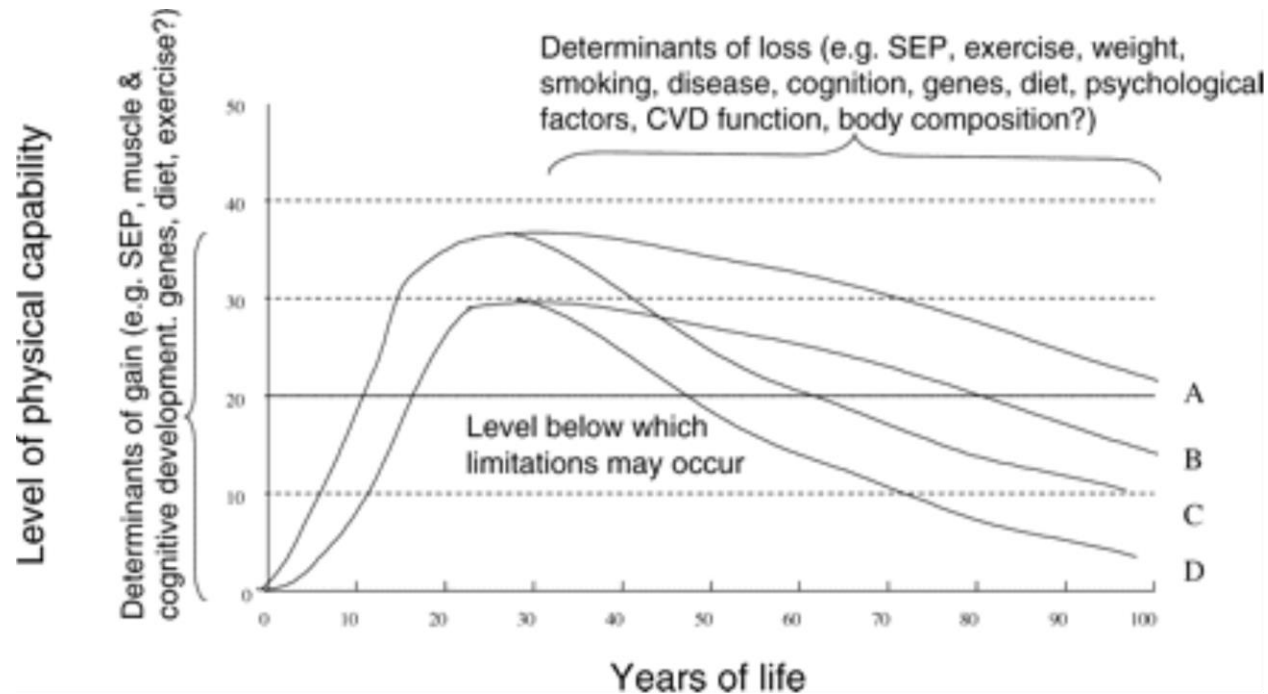
Figure 2: Unemployment August 1974–November 1981 by levels of childhood distress.



Source: Egan et al, 2015

- Determinants of health have a long lag (e.g. 10 years between smoking cessation and carcinoma, Dela Cruz et al, 2011)

# A life-course approach to health inequalities in old-age



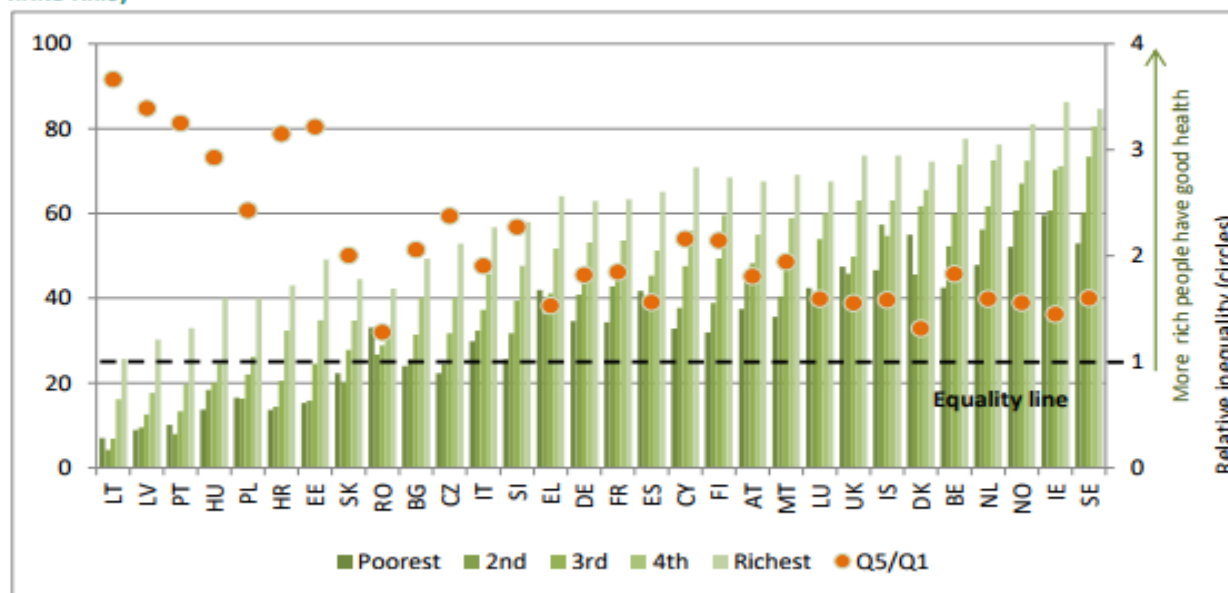
Source: Diana Kuh and the New Dynamics of Ageing (NDA)  
 J Gerontol A Biol Sci Med Sci. 2007;62(7):717-721. Copyright 2007 by The Gerontological Society of America

# Ageing and health inequalities

Intragenerational inequalities: how unequal in health are older Europeans?

# Current health inequalities among old-age population in Europe

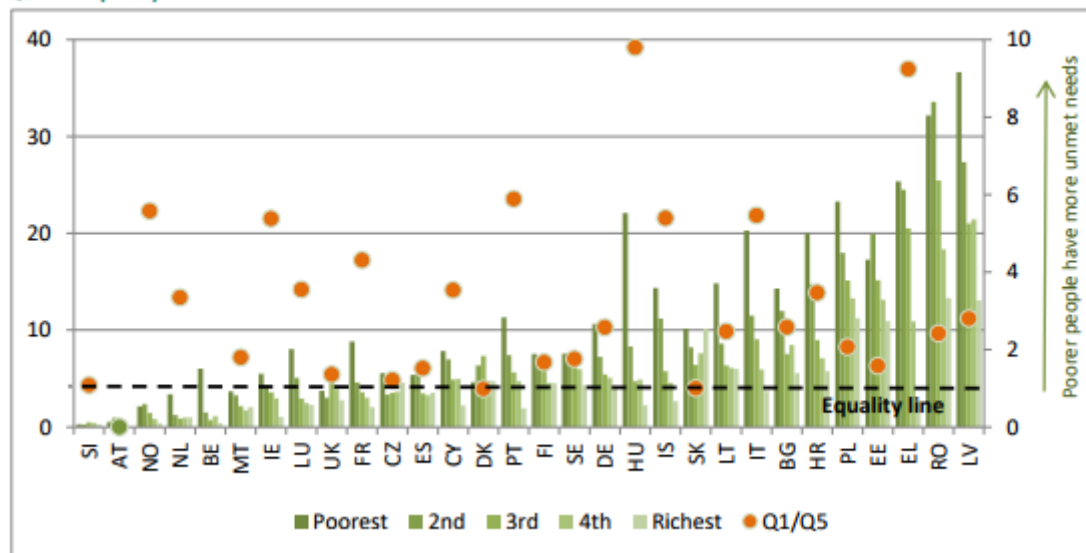
FIGURE 21 PROPORTION OF 55 AND OLDER WITH GOOD SELF-ASSESSED HEALTH BY INCOME QUINTILE (IN % ON LEFT-HAND AXIS)



Source: Ilinca et al (2016), based on EU-SILC data

# Inequalities in health care access among old-age population in Europe

FIGURE 26 PERCENTAGE OF INDIVIDUALS AGED 55 AND OLDER WITH UNMET HEALTHCARE NEEDS BY INCOME QUINTILE (IN %)



Source: Ilinca et al (2016), based on EU-SILC data

# Inequalities in health determinants among old-age population in Europe

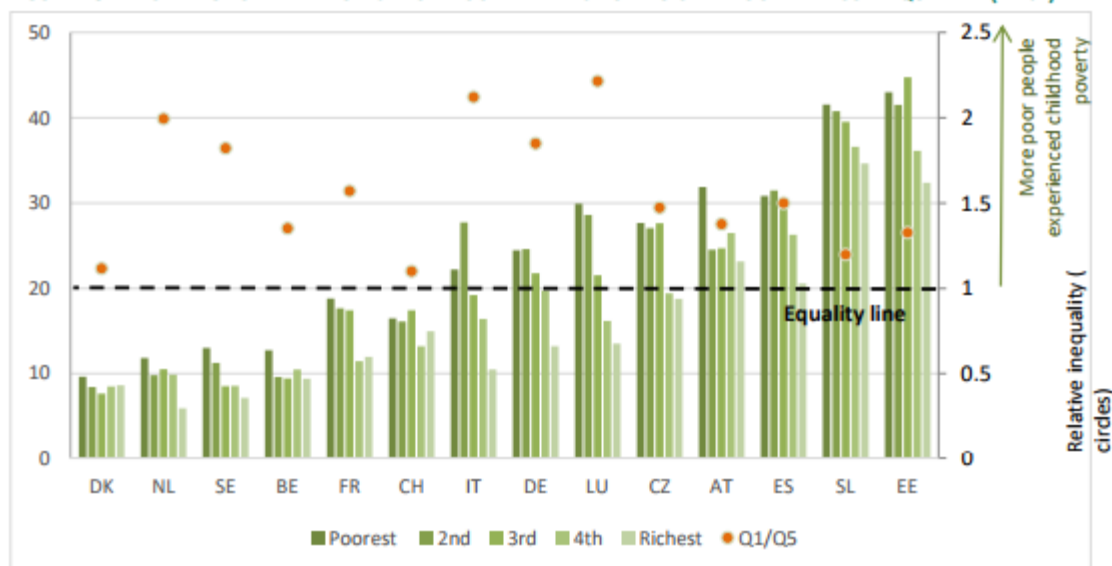
FIGURE 24 PROPORTION OF INDIVIDUALS DOING VIGOROUS PHYSICAL ACTIVITY AT LEAST ONCE A WEEK BY INCOME QUINTILE (IN %)



Source: Ilinca et al (2016), based on SHARE data

# Evidence of low social mobility in Europe

FIGURE 29 PERCENTAGE OF INDIVIDUALS FROM POOR FAMILIES DURING CHILDHOOD BY INCOME QUINTILE ( IN %)



Source: Ilinca et al (2016), based on SHARE data

# What about acceding countries and Eastern partnership

- CIS: “no country for old-men”; large and rising inequalities 1990s (Walters & Suhrcke, 2005)... Small improvements since (Goryakin et al 2015)
- Western Balkans: limited comparative evidence (Eikemo et al, 2009)

Figure 1 ORs (95% CI) (y-axis) and absolute differences (95% CI) of ill health (x-axis) by education in former Yugoslavia

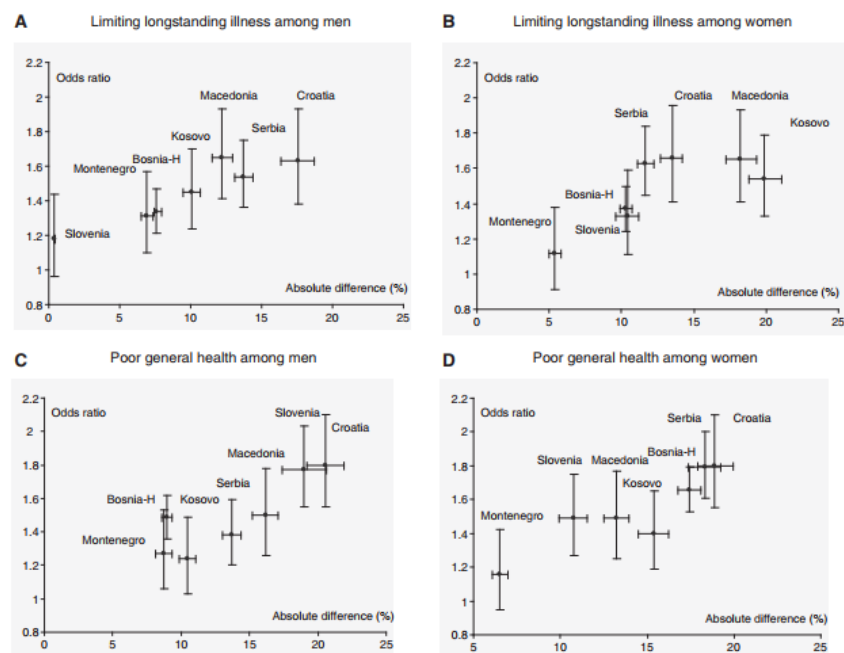
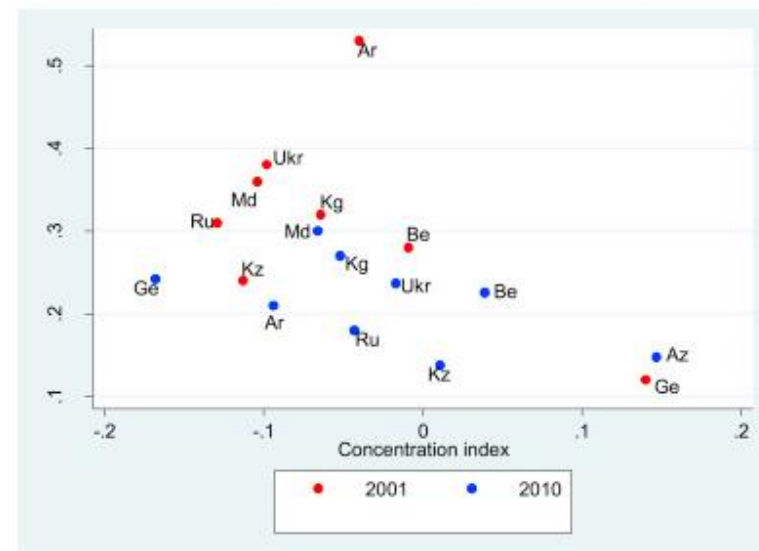


Fig. 1. Is there a trade-off between average level of poor mental health and wealth-related inequalities in poor mental health?



Note: “Ar” stands for Armenia, “Az”- Azerbaijan, “Be”-Belarus, “Ge”- Georgia, “Kz”- Kazakhstan, “Kg”- Kyrgyzstan, “Md”- Moldova, “Ru”-Russia, “Ukr”- Ukraine.

Source: Eikemo et al (2009)

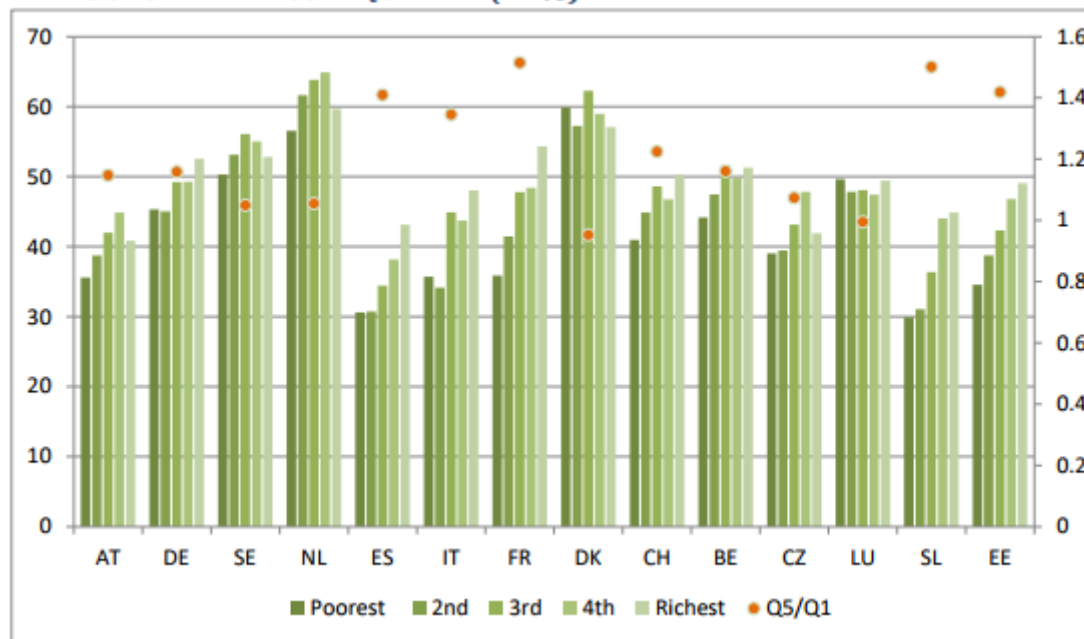
Source: Goryakin et al (2015)

# Future health inequalities... Forget all you just saw

- Working conditions → Current old-age health inequalities (Molarius et al, 2006; Fors et al, 2007; Parker et al, 2013)
- Lifestyles and chronic conditions → Future old-age health inequalities?
- Evolving prevalence of determinants of health: tobacco epidemic
- Education not only the preserve of elites: reduced inequalities or greater self-selection of the poor
- Public policies: inequalities a price to pay for success?
- Persistent health inequalities, even in high income and egalitarian societies (Fors & Thorslund, 2014)

# Back in the day... When Marlboro man was rich and educated

*A4.3.9 PROPORTION OF INDIVIDUALS AGED 55 AND ABOVE WHO REPORT EVER HAVING SMOKED BY INCOME QUINTILE (IN %)*



Source: Ilinca et al (2016), based on EU-SILC data

# Pitfalls and possibilities for assessign inequalities in old-age

- What makes for low/high socio-economic class among older people? (Lindelov 2006, Rodrigues et al, forthcoming)
- Life-course approach → choice of indicators
- Measuring the social gradient

**Table 3 A comparison of different indices of the social gradient**

Gradient Measure	Advantages	Disadvantages
<b>Frequency Ratios</b>	Illustrational/ ease	interpretational -Information loss -Limited data applicability -One-dimensional
<b>Odds Ratios</b>	-Illustrational/ ease -Possibility of including control variables	interpretational -Information loss in the case of categorical SES variable -Data restrictions -One-dimensional
<b>Correlation index</b>	-Experience of total population -versions for continuous and categorical data	-One-dimensional
<b>Slope Index of Inequality</b>	-Experience of total population -Based on rankings - Possibility of including control variables	-Sensitive to mean population health -Possible interpretational difficulty
<b>Relative Index of Inequality</b>	-Experience of total population -Based on rankings - Possibility of including control variables	-Possible interpretational difficulty
<b>Concentration Index</b>	-Experience of total population -Based on rankings -Properties well understood -Multi-dimensional/ Possible to decompose	-Zero value does not imply equality in childcare use -Modification is necessary with binary dependent variable

Source: Medgyesi & Kalaverzou (2014)

**Thank you very much**

**End**