LIVESImpact

Life-long impact of disadvantaged socioeconomic conditions in childhood on health in old age: what difference does the welfare state make to improve healthy ageing?

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Run every two years since 2004, the Survey of Health, Ageing and Retirement in Europe (SHARE) allows to study the effect of health, social, economic and environmental factors on the life course of individuals across Europe. The data set includes information on 140,000 individuals aged 50+ in 28 European countries and Israel. Its questionnaire contains all important areas of the respondents' life histories, including civil status, children, housing, work history and more detailed questions on health and health care.

Long-Lasting Impact of Socio-economic Conditions in Childhood

Taking into account from this vast set of data the main breadwinner's occupational position, the number of books at home, the number of people per household and its quality at the age of 10, our research clearly shows the negative impact of socioeconomic conditions in childhood on health outcomes for individuals 50 years of age and older. As illustrated in diagram 1, the data analysis indicates that a significant and continuous gap remains between individuals who have experienced the most advantaged socioeconomic conditions in childhood ➡

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and individuals who have experienced the opposite. At age 50 all the way to the end of life, the difference remains significant.

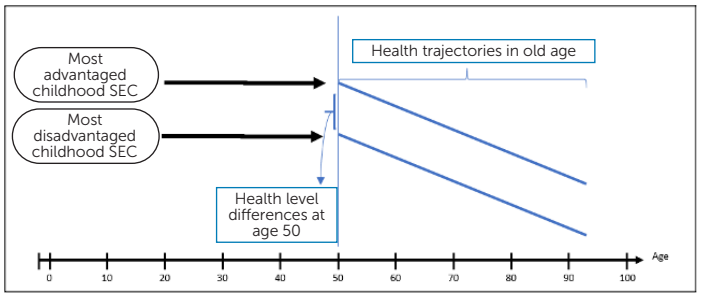

Diagram 1: Socioeconomic conditions in childhood and impact on health trajectories for individuals 50+

Studies conducted as part of the LIFETRAIL project (Cullati et al. forthcoming), of which this research is part, further corroborate the relationship between socioeconomic conditions in childhood and negative health outcomes in old age. Aartsen and colleagues have found a clear pattern in cognitive functioning in old age related to childhood socioeconomic conditions. For instance, those from more affluent households show higher levels of fluid intelligence in old age and thus retain a greater ability to solve novel reasoning problems (Aartsen et al., 2019). Other findings show persistent differences in old age linked to adverse socioeconomic conditions in childhood in terms of:

- respiratory function (Cheval, Chabert, Orsholits et al., 2019)
- physical inactivity, especially among women (Cheval, Sieber et al., 2018)
- the ability to perform Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs), especially among women (Landös et al., 2018)
- sleeping problems, especially among women (van de Straat et al., 2020)
- cancer onset and participation in early cancer screenings (van der Linden et al., 2018)
- frailty (van der Linden et al., 2020)
- muscle strength (Cheval, Chabert, Sieber, et al., 2019)
- depressive symptoms (von Arx et al., 2019)

Buffering Effect of Socioeconomic Conditions in Adulthood for Health Outcomes in Old Age

When looking specifically at socioeconomic conditions in adulthood as a period in the life course that may alter health outcomes in old age, our research has relied on standard international classification references, taking as measures education levels (ISCED), main occupational position (ISCO) and satisfaction with (household) income (i.e. ability to make ends meet: easily, fairly easily, with some difficulty, with great difficulty).

Looking at the self-rated health indications at old age, there is evidence suggesting that up to 64 per cent of the negative effects of socioeconomic disadvantages in childhood can be offset depending on the type of welfare regime in place. Differently put: in terms of healthy ageing, childhood deprivation can be compensated up to this percentage through improved socioeconomic conditions in adulthood. Moreover, looking at differences in health trajectories between individuals who experienced improved socioeconomic conditions in adulthood vs the opposite, a significant gap remains at age 50 for self-rated health but with increasing age this reduces to become more equal, as shown in diagram 2.

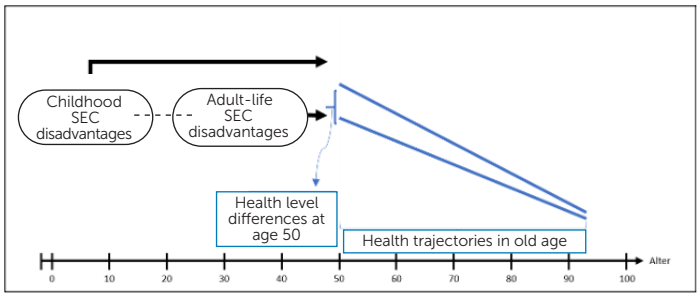

Diagram 2: Differences in health trajectories by childhood and adult-life socioeconomic disadvantage

The other studies from the aforementioned LIFETRAIL project equally show evidence for inequalities in health in old age associated with adverse adult-life socioeconomic conditions and likewise suggest that these cannot fully compensate a bad start into life (Cheval, Boisgontier, et al., 2018). According to Landös and colleagues, this is particularly true for women (Landös et al. 2018).

Improvement in Healthy Ageing as a Variable of Social Protection Expenditure

While our research has found no changing inequalities due to childhood socioeconomic conditions for trajectories of health in old age across various welfare regimes, it has seen narrowing inequalities associated with improved adult-life socioeconomic conditions in welfare regimes found in Central Europe and Scandinavia.

Moreover, our research has been able to show how higher social protection expenditure has the potential to reduce inequalities in health in old age associated to unfavourable socioeconomic conditions during the life course. Using data from the European Union's statistical office (Eurostat), which includes data from EFTA countries such as Switzerland, our research examines this link by analyzing expenses for social ➡

protection. These cover sickness/health care, disability, old age, survivors, family/children, unemployment, housing, and social exclusion. Aggregated and expressed in terms of percentage of the GDP, the analysis shows that in women's subjective (self-rated health) and in both men and women's objective health (grip strength) in old age social protection expenditures reduced inequalities between those who lived through adverse socioeconomic conditions and those who lived through favourable socioeconomic conditions (see diagram 3).

A more detailed look into the analysis also shows some important variations such as differences between gender and the type of assessment. Thus, higher social protection expenditure appears to reduce inequalities due to life-course (childhood and adulthood) socioeconomic disadvantage in women's subjective and self-declared health and objective health, based on hand-grip strength. Meanwhile, for the male population in this analysis this reduction can only be seen in terms of objective health. ■

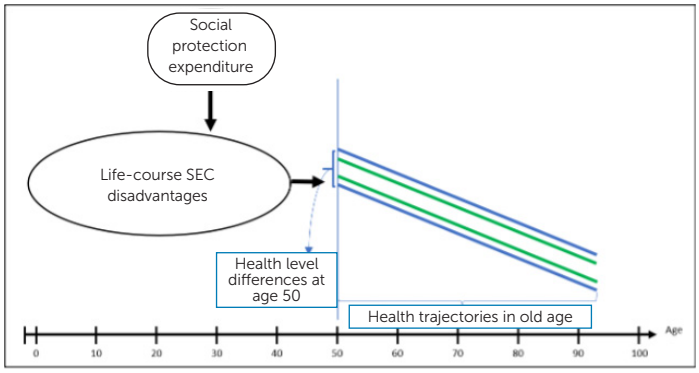

Diagram 3: Differences in health trajectories by life-course SEC disadvantages in countries with high expenditure in social protection (green) vs differences in health trajectories by life-course SEC disadvantages in countries with low expenditure in social protection (blue).

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