

2.P. Population health metrics and innovative data sources

Slowing improvements in life expectancy across European Economic Area countries

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Background:

Life expectancy improvements have slowed down in several European countries since around 2011. The relative contributions from changes in specific conditions (e.g. cancers) and broader risk factors (e.g. smoking or austerity) remain unclear. We aimed to explore the different potential causes in 17 European Economic Area (EEA) countries.

Methods:

We compared Global Burden of Disease (GBD) study estimates for life expectancy, years of life lost (YLLs) and population attributable fractions (PAFs) for risk factors, for 2005-2011 and 2011-2017 for 17 EEA countries. Three countries with the largest absolute improvements and three

with the smallest were selected for analysis by gender, age, condition and risk factors.

Results:

Norway, France and Belgium had the largest improvement in life expectancy (+1.5, +1.2 and +1.2 years respectively) from 2011 to 2017, and Germany, Iceland and the UK the smallest (+0.1, +0.2 and +0.2 years). Life expectancy reduced slightly for women aged over 80 in Germany and UK, men aged over 50 in Germany, and for men in all age groups up to 90 years in Iceland. Norway, France and Belgium saw faster improvements in YLLs from lung cancer and Norway and France for COPD in both men and women, and from self-harm in men, after 2011 than before. PAF for tobacco declined faster after 2011. Germany, Iceland and the UK saw slower improvements in cardiovascular disease and in Germany and the UK lung cancer. In Iceland, YLLs for cancers, self harm, respiratory disease, cirrhosis and dementia all worsened after 2011. PAF for tobacco remained high or declined less after 2011 in all 3 countries. PAFs for alcohol and drug use remained high in Iceland and UK.

Conclusions:

Differential changes in major fatal diseases and risk factors help explain national changes in life expectancies, but national differences in data availability may affect results. Further research is needed into the 'causes of the causes', such as the 2008 economic crash in Iceland.

Key messages:

- Differential changes in major fatal diseases and risk factors help explain national changes in life expectancies.
- Norway, France and Belgium had the largest improvement in life expectancy from 2011 to 2017, and Germany, Iceland and the UK the smallest.