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Commentary

Trends in health expectancies across Europe: Countries that are achieving compression of morbidity and those that are not

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There is more to health than the presence or absence of disease and positive measures of health have therefore been recommended [1] to support policy making. But measuring health not illness is hard. Translating those health measures into population surveillance tools is even more demanding. International comparisons of health naturally default to the available negative measures such as mortality, health-care utilisation and claims data. However, the precision and accuracy of such measures does not make up for their limited scope when used to assess population health. As people live longer, we need to know whether time spent in poor health is expanding or being compressed [2]. To do that requires comparable information on levels of health and disability throughout life. To compare trends in health across countries we need the results of surveys conducted in multiple countries using standard methods and repeated over a period. However, such surveys are expensive and understandably rare. One example is the European Union's Survey of Income and Living Conditions (EU-SILC). Combined with published mortality data this survey has been used to calculate disability free life expectancy in the countries of the European Union [3]. Harmonisation of data collection between countries has improved since 2008 making results even more comparable. Analysis of health expectancies (or Healthy Life Years (HLYs)) based on the EU-SILC have previously shown that these vary more between countries than life expectancies and correlate with economic measures of prosperity [3].

The issue of health expectancy is becoming especially important as there is clear evidence that the rate of life expectancy increase has stalled in some European countries including Germany and the UK [4]. A new study published in *The Lancet Regional Health – Europe* [5] has used the EU-SLIC to compare trends from 2008 to 2016 in both life expectancy and HLYs in the

EU28 countries. Sex- and age-specific expected HLYs were calculated using Sullivan's method [6] from birth and at 65 years for each country. Amongst other analyses, these results were used to categorise countries according to whether morbidity was being compressed or was expanding from 2008 to 2016 or was in a state of "dynamic equilibrium".

The results are not very encouraging. Most countries showed evidence of expanding morbidity or were in equilibrium while only Germany, Ireland and Slovakia stood out as showing evidence of compression [5]. For a sample of countries, changes in mortality and health were further broken down by age group to illustrate how age-specific changes contributed to the overall trends in health and life expectancies. Countries that did well overall (Germany, and to a lesser extent Italy) showed marked improvements in health throughout life including in working age adults. Ones that are doing badly (United Kingdom, Austria, Luxembourg) showed worsening health also over multiple age ranges.

For the UK, which is a focus of the article, it turns out that changes in health expectancy relative to other European countries have been much more striking than those in life expectancy. In 2008 and in 2016, the UK ranked 10th and 17th amongst the 28 countries for life expectancy at birth for men and women, respectively. By contrast, for healthy life expectancy at birth the UK rank dropped from 4th to 11th for men, and from 3rd to 14th for women.

There are clearly warnings in these results for policy makers in the UK and across Europe and not just for those working in health. The goal of compressing morbidity is key not just to improving the health and well-being of the population but also to securing sustainable health and care services and affordable welfare and pension provision. Recent evidence from the Global Burden of Disease study [7] suggests that an increasing burden of preventable ill health is not a problem confined to Europe. There seems to have been widespread international failure to successfully address the key underlying risks that cause disability throughout life (with the worthy exception of smoking where population attributable fractions have decreased). As a result, there has been little change in the health inequalities that follow from the socio-economic patterning of those risks. The COVID-19 pandemic has further exposed this rising burden of morbidity and associated inequality [8].

For the UK, and for England which is about to reorganise its national public health functions, these results cannot be ignored. They highlight the need to think again about how to address the increasing burden of ill health and health inequalities [9]. There is

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an existing UK Government ambition to improve healthy life expectancy by 5 years by 2035 and we have a good idea what needs to be done to achieve it [10]. As we emerge from the catastrophe of the coronavirus pandemic the policy and implementation focus needs to shift firmly to improving the long term health of the citizens of Europe.

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