
The UK Health Crisis:

Early 2020 Update

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Introduction

This short paper is a summary of a talk given in London in February 2020 immediately before the 2020 pandemic began shortening many lives in the UK. On 22 January 2020, in the House of Commons, the Prime Minister said ‘The discrepancy in life expectancy in this country is a disgrace. Nonetheless, it is coming down, and it will come down. Life expectancy overall is at an all-time high’.

This was not true as far as the data then available could reveal. According to the Office for National Statistics (ONS), life expectancy in the UK peaked in 2014, and had not yet returned to this level. In addition, the Infant Mortality Rate (IMR) in England and Wales in the years after 2014 had risen for 3 years in a row and, if the UK had achieved the average for the European Union, then 5 fewer babies would have died in the week that the Prime Minister spoke.

Eurostat has helpfully begun reporting on how the UK compares with the EU-27 on a range of health measures. Protection of the health of its people is one of the most important roles for a government. These European comparisons will be especially useful to reveal whether the UK is succeeding in the difficult years ahead.

Life Expectancy and Infant Mortality Rates

One report, entitled “Mortality and Life Expectancy Trends in the UK”¹, issued in November 2019, implied that life expectancy had not fallen and, if it were to do so, it would be a ‘subgroup’ issue. “No government wants to see the life expectancy of its population fall on its watch. However, the risk of this happening is very real – particularly within specific subgroups of the population. This can only be prevented

¹ Mortality and Life Expectancy Trends in the UK (2019),

<https://www.health.org.uk/publications/reports/mortality-and-life-expectancy-trends-in-the-uk>

through coordinated, wide-ranging, long-term action, led from the centre of government.”

However, the life expectancy did fall in the UK in 2015 and by 2018, and life expectancy across all groups in the UK remained below its 2014 high when most recently measured, which was for 2018. Figure 1 below shows the most recent European comparisons available for four countries from 2014 to 2017:

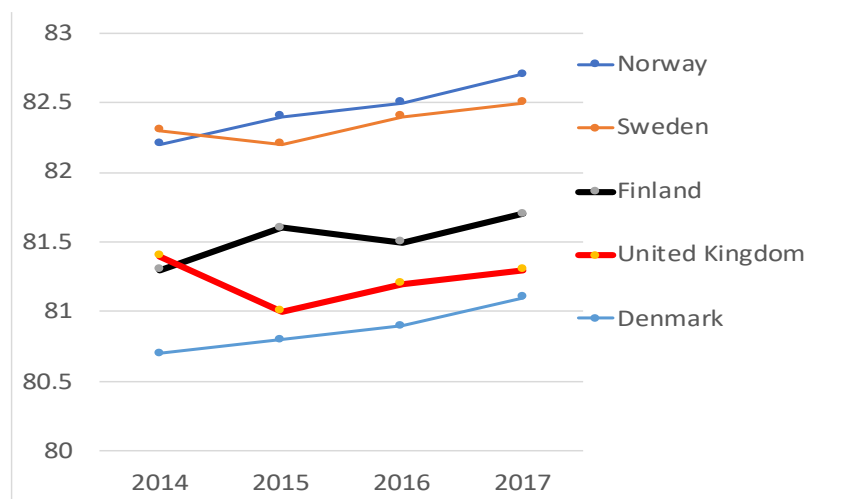
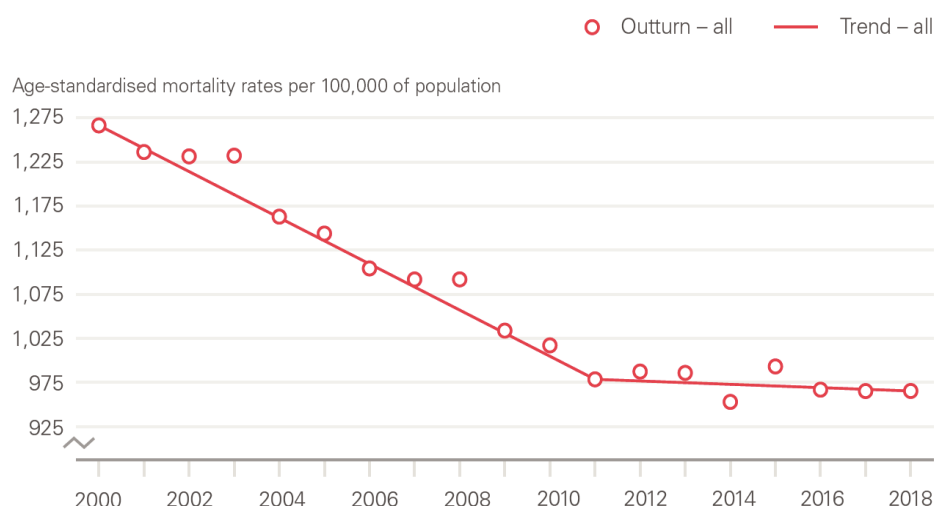


Figure 1: Life Expectancy: North-West Europe, 2014-2017²

The deterioration since 2014 is further demonstrated in Figure 2, which shows the changing trends in mortality rates in England and Wales from 2000 to 2018. This figure shows that the age-standardized morality rate was declining steadily until 2011 and reached its lowest rate in 2014. However, the mortality rate rose in 2015 and by 2018 had still not attained its previous low in 2014.

² Data Release (2019), https://ec.europa.eu/eurostat/databrowser/view/sdg_03_10/default/table?lang=en



Source: Health Foundation analysis using ONS, Deaths registered in England and Wales, 2018.

Figure 2: Changed Trend in Mortality Rate Improvements, England and Wales, 2000-2018³

The IMR has risen significantly in England since 2014 compared to Scotland, as seen below, according to the last line estimate for England & Wales. This means upwards of an estimated additional 1100 infants have died since 2014.

IMR(/1000)	2011	2012	2013	2014	2015	2016	2017	2018
Scotland	4.1	3.7	3.3	3.6	3.2	3.3	3.3	3.2
England	4.2	4	3.8	3.6	3.7	3.8	3.9	
Difference	-0.1	-0.3	-0.5	0	-0.5	-0.5	-0.6	Total
Babies	72	219	349	0	349	348	407	1745

Figure 3: Single-Year Life Tables- England & Wales⁴

The deterioration in health is also shown by the decrease in life expectancies at birth for males and females between 2014 and 2018, as seen below in red. Life expectancies at birth decreased after 2014 for women in England and for men and women in Scotland, Wales and the UK overall.

³ Mortality and Life Expectancy Trends in the UK (2019),

<https://www.health.org.uk/publications/reports/mortality-and-life-expectancy-trends-in-the-uk>

⁴ Hiam, Lu., Dorling, Danny, McKee, Martin (2020) Things fall apart: The British Health Crisis 2010-2020", British Medical Bulletin, February.

	Life Expectancy at birth				Change 2014-2018			
	2014		2018		Years		Days of life	
	Men	Women	Men	Women	Men	Women	Men	Women
England	79.51	83.23	79.55	83.20	0.04	-0.03	15	-11
Northern Ireland	78.61	82.38	78.84	82.44	0.23	0.06	84	22
Scotland	77.32	81.34	77.05	81.01	-0.27	-0.33	-99	-121
Wales	78.79	82.61	78.23	82.19	-0.56	-0.42	-205	-153
UK	79.25	82.99	79.24	82.93	-0.01	-0.06	-4	-22

Figure 4: Life Expectancy at Birth for Males and Females, 2014 – 2018⁵

In contrast, the lowest IMR in the world was recently recorded in Finland, where life expectancy also continues to rise rapidly. "Finland has long been a country with low maternal and infant mortality. In 2015, the infant mortality rate was 1.7 deaths per 1,000 live births: only 97 children died during their first year of life. This was the lowest figure ever recorded in Finland"⁶.

Finland's low IMR is also possibly the lowest rate worldwide in 2015 with only Luxembourg having a lower IMR in the European Union .

⁵ Life Expectancy at Birth for Males and Females, 2014-2018 (2019)

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/datasets/singleyearlifetablesuk1980to2018>

⁶ <https://blogi.thl.fi/finlands-low-infant-mortality-has-multiple-contributing-factors/>

Neonatal mortality rankings, European Union countries, 1990 to 2015



Figure 5: Neonatal Mortality Rankings, European Union Countries, 1990 to 2015⁷

State Spending and Taxation

EU countries now contrast greatly with other OECD countries, such as Colombia in South America, the UK, USA, Australia and Chile in terms of the proportion of their GDP that they spend on education, with the clear majority of their spending going towards state education rather than private education.

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<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/childhealth/articles/ukdropsineuropeanchildmortalityrankings/2017-10-13>

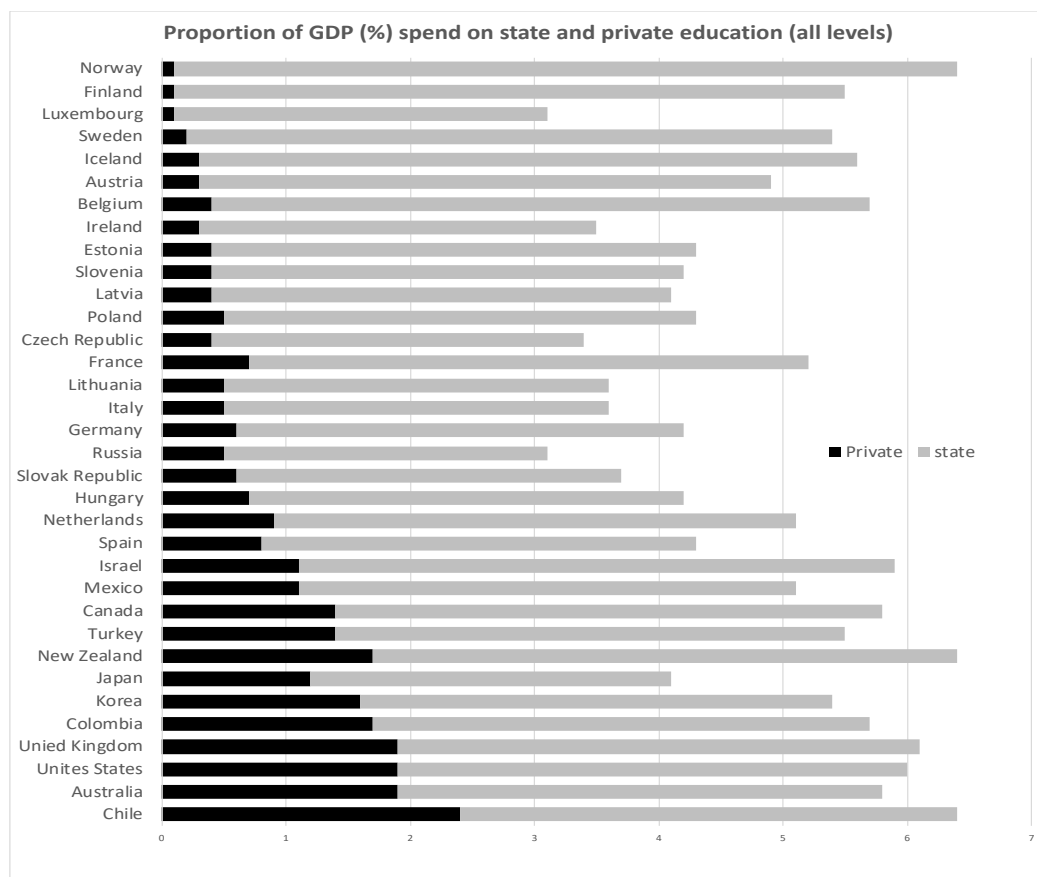


Figure 6: Proportion of GDP (%) Spend on State and Private Education (All Levels)⁸

In comparison to OECD countries, the UK is a low-tax, low-spend country, as seen in Figure 7.

⁸ OECD (2019) Education at a Glance 2019, 10 Sep 2019, https://www.oecd-ilibrary.org/education/education-at-a-glance-2019_f8d7880d-en

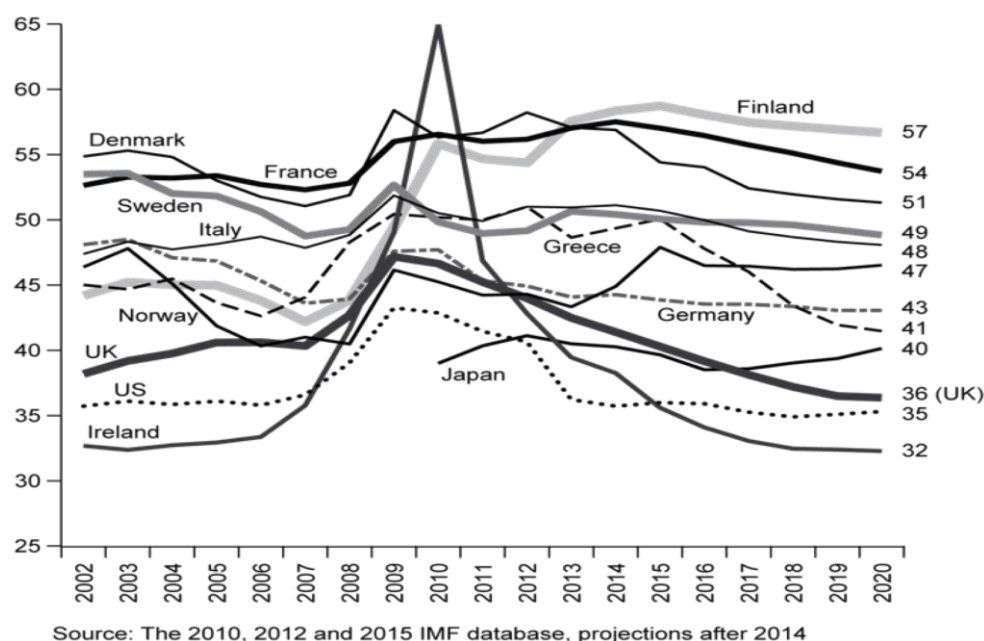
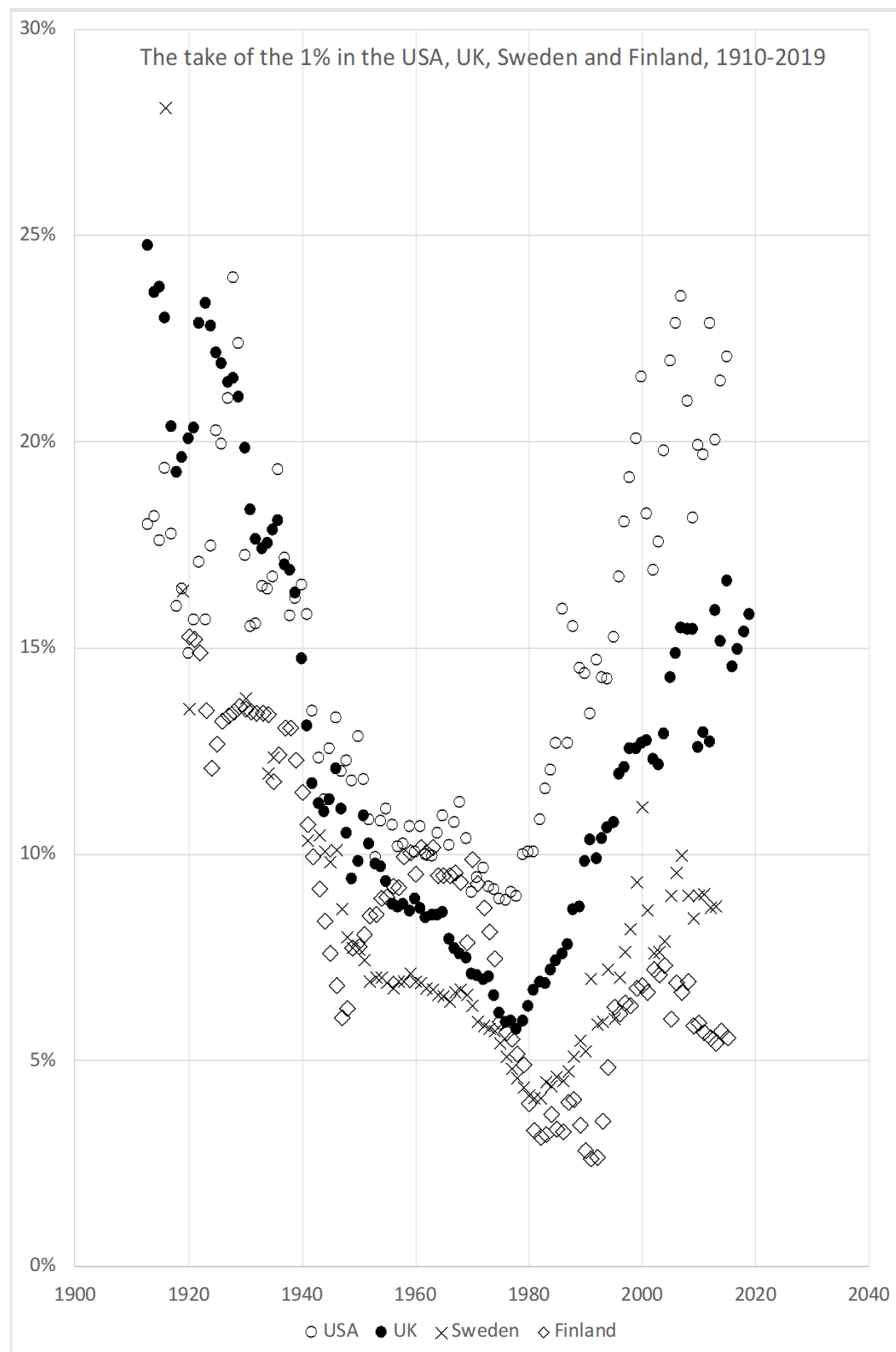


Figure 7: State Spending as a Proportion of GDP, Twelve Richest Countries (%), 2002-2020

Figure 8 shows the take of the 1% in the UK, US, Sweden and Finland. All 4 countries show a U-shaped trend in the take between the 1920s and 2010s, with a significantly higher take amongst the 1% in the US and UK after the 1980s. This data series is detailed in Dorling, Danny (2019) *Inequality and the 1%*, London: Verso (third edition).

Note: fiscal data for tax units in the USA (1913-2015) and Sweden (1916-2013). For Finland tax units 1920-1969, individual from 1970-1979, and post-tax 1980- 2016. For the UK the data is for 1910-2019, pre-tax, however estimated rates of tax evasion and avoidance by the top 1% are so high in the UK that this is a comparable time series to the post-tax Finish data from 1980 onwards.

Figure 8: The Take of the 1%, USA, UK, Sweden and Finland, 1910-2019⁹⁹ World Inequality Database (2019), The Take of the 1% in the USA, UK, Sweden and Finland, 1910-2019

Death Rates in the UK

On the day of the EU referendum, data from the ONS revealed there had been 52,400 more deaths in the year to June 2015 as compared to the same period a year before. Death rates in England and Wales rose overall by 9% and by: 12% for those aged 90+; by 10% for those aged 85-89; 7% for those aged 80-84; 5% for those aged 75-70; and by 3% for those aged 55-74. Based on the ONS's data, death rates only fell for adults aged 25-29. The death rate increases were unprecedented and were primarily attributed to dementia and Alzheimer's, with influenza being suggested as a contributory factor. Austerity "almost certainly" played a major role. Those with long term care needs were dying earlier. These health and social services crises will worsen further as national finances worsen and as it becomes harder to recruit and retain staff from the European mainland after Brexit.

Figure 9 shows what a severe influenza epidemic looks like in England and Wales.

870 D. M. Fleming and A. J. Elliot

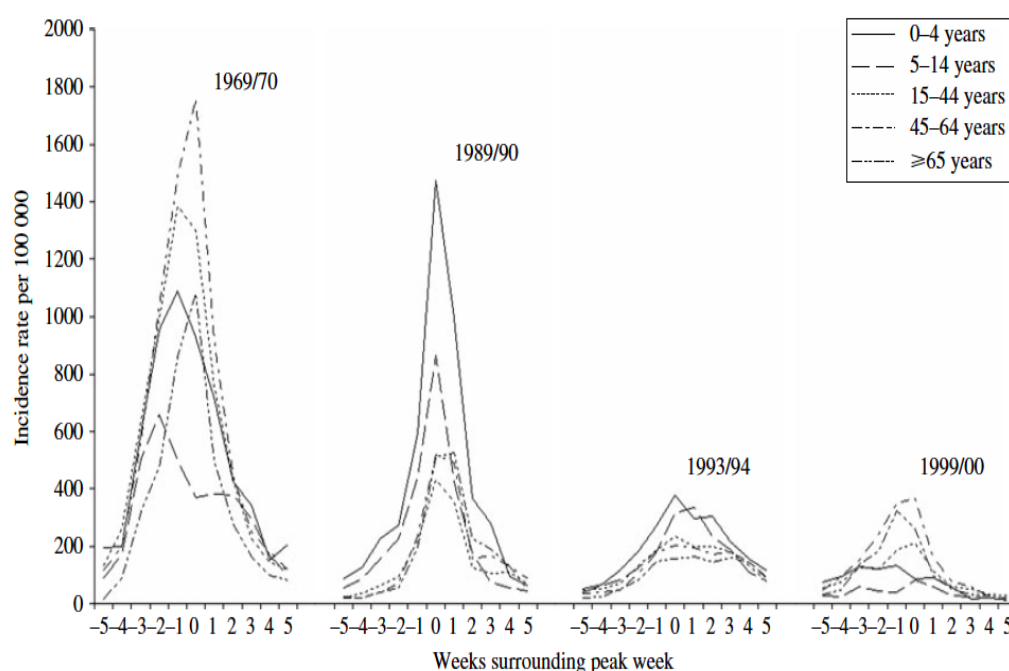


Fig. 2. The weekly incidence of Influenza-like illness (ILI) described by age for a selection of the more severe epidemics over the last 40 years. Age-specific rates are presented for the weeks surrounding the peak week of all-age incidence (week 0).

Figure 9: Weekly Incidence of Influenza-like Illness Described by Age for a Selection of the More Severe Epidemics over the Last 40 Years. Age-specific rates are presented for the weeks surrounding the peak week of all-age incidences.

The largest single-year increases in mortality in England and Wales between 1840 - 2015, meaning the relative increase in mortality rate on the year before were in 1918 (24%), 1940 (16%), 1929 (15%), 1895 (13%), 1846 (10%), 1849 (9%), and 2015 (9%). The rises in mortality rates for 1918, 1940, 1929, 1895, 1846 and 1849 are all attributed to the Influenza pandemic, World War II, The Very Cold Winter, The Great Frost, and Cholera (twice), respectively. However, the 9% increase in 2015 is not yet attributed to a specific cause.

The rise in the overall death rate between the calendar years 2014 and 2015 was 7% - the last time a calendar year rise was as big as that was 1951 (when more people died of influenza in Liverpool than died in the 1918 pandemic¹⁰).

Before the great rise in deaths, we had some warnings that were dismissed as artifact, with self-reported surveys showing decreasing satisfaction with health in the UK between 2009 and 2013.

Trends in self-reported health used by ONS in annual well-being reporting

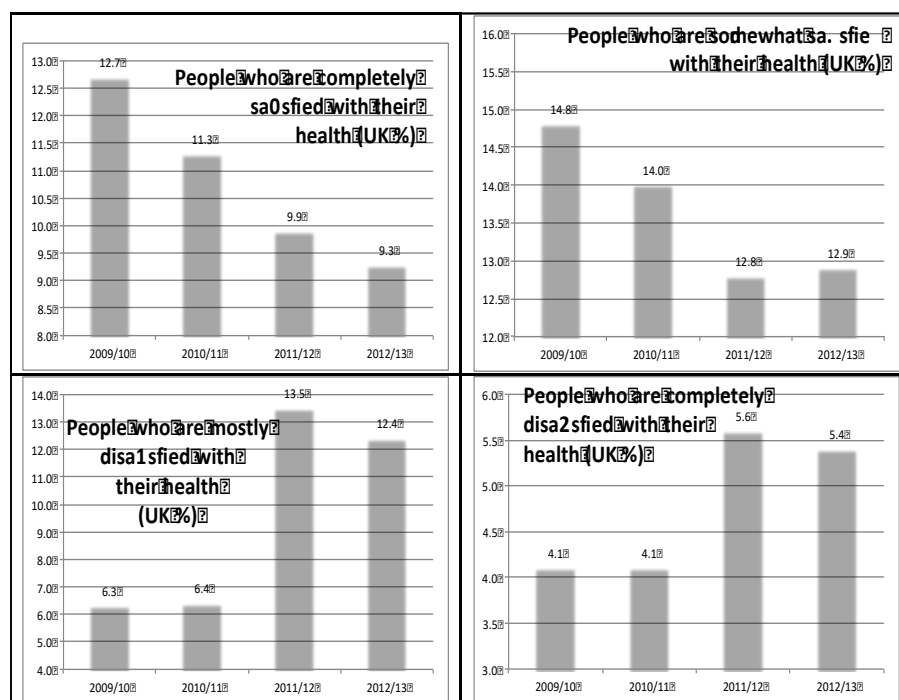


Figure 10: Trends in self-reported health

¹⁰ http://wwwnc.cdc.gov/eid/article/12/4/05-0695_article

This is also shown in Figure 11 as cohort life expectancies at age 65 were shown to decrease for men and women between 2009 and 2017.

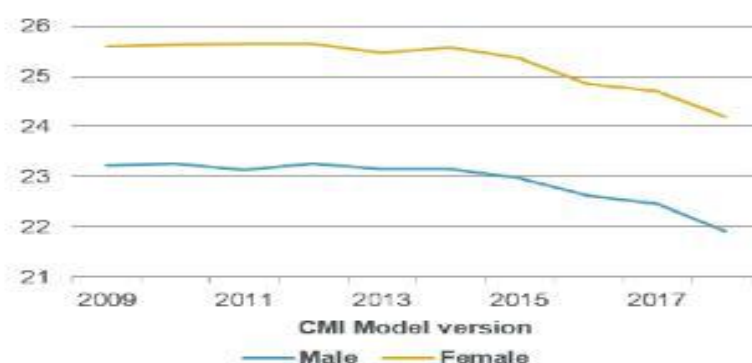


Figure 1: Cohort life expectancies as at 1 January 2019 at age 65.

Figure 11: Cohort Life Expectancies as at 1 January 2019 at age 65¹¹

What does the June 2019 ONS ‘MYE’ data release tell us about life expectancy? On 26 June 2019, the annual midyear estimates of the population of the UK were released. The headline figure on mortality was that there were 623,000 deaths, or 20,000 more than the previous year, meaning a 3% increase. However, the UK is also ageing, so to what extent does the rise in mortality matter?

According to the BBC story “UK population growth rate stalls, official estimates show”¹² a spokesperson of the lobby group “Population Matters” (which used to be called “The Optimum Population Trust”) said: “Our already unsustainable population is continuing to rise and that will continue until a positive strategy is put in place to address it”. The Guardian newspaper ran a story about migration saying: “At 275,000, this net number of immigrants was 6,000 higher than the average for the past five years and 45,000 higher than last year.”¹³ And the Express

¹¹ Lucinda Hiam and Martin McKee: The deepening health crisis in the UK requires society wide, political intervention, March 8, 2019: “These are not just numbers, these are lives”. <https://blogs.bmj.com/bmj/2019/03/08/lucinda-hiam-and-martin-mckee-the-deepening-health-crisis-in-the-uk-requires-society-wide-political-intervention/>

¹² <https://www.bbc.co.uk/news/uk-48769175>

¹³ <https://www.theguardian.com/world/2019/jun/26/uk-population-rises-to-664-million-but-rate-of-growth-slows>

newspaper reported that: *“The surge is the equivalent of adding a city the size of Coventry to the country.”*¹⁴

The data released by the ONS was very detailed. For instance, in Coventry, the number of men aged 86, 87, 88, 89 and 90+ who died in the most recent year was revealed to be 49, 45, 33, 49 and 254, respectively. The numbers those who had died the year before for those ages was, in turn: 46, 42, 27, 39, and 216. In each case, more had died, but of course this could just be down to chance and it partly was – but this is not true for England as a whole.

An analysis of ONS mid-year estimates on changes in mortality in England as released on 26 June 2019 shows that the mortality rate increased for several age categories between 2016/2017 and 2017/2018. For men, the mortality rate increased for those aged: 5-9 (14%), 15-19 (7%), 20-24 (12%), 30-34 (9%), 35-39 (3%), 40-44 (6%), 45-49 (2%), 50-54 (6%), 55-59 (5%), 60-64 (1%), 65-69 (3%), 65-70 (2%), 80-84 (2%), 85-89 (1%) and 90+ (1%). This means that there was an average increase in the mortality rate by 3% for men in England and only for men aged 0-4, 10-14, 24-29 and 70-74 did the mortality rate actually decrease between 2016/2017 and 2017/2018.

For women, the mortality rate increased or stayed the same over the same time period for those aged: 5-9 (0%), 20-24 (4%), 25-29 (3%), 45-49 (4%), 55-59 (4%), 60-64 (1%), 75-80 (2%), 80-84 (1%), 85-89 (1%) and 90+ (3%). This means that there was an average increase in the mortality rate by 2% for women in England and only for women aged 0-4, 10-14, 15-19, 30-34, 35-39, 40-44, 50-54, 65-69, and 70-74 did the mortality rate actually decrease between 2016/2017 and 2017/2018.

Figures 12 shows the increase in the mortality rates for both men and women as age increases and Figure 13 shows how the absolute number of people dying generally increases by age but does not impact both genders equally. Elderly women in general were more badly effected than elderly men in both 2015 (not shown in this figure) and very elselly women (aged 90+) in the rises in mortality between 2016-17 and 2017-2018. Elderly women were more likely to be living alone has compared to elderly men. Living alone in a time of austerity is more dangerous as you cannot pool resources. Conversely living alone is more beneficial,

¹⁴ <https://www.express.co.uk/news/uk/1145955/uk-population-office-for-national-statistics-ons>

at least directly, in a time when rates of infectious disease deaths are high (although the loneliness may well be hard to bare).



Figure 12: Rise in Mortality Rates by Age, Men and Women, England, 2016-17 to 2017-18, Increase in Mortality Rate per One Thousand People at Risk

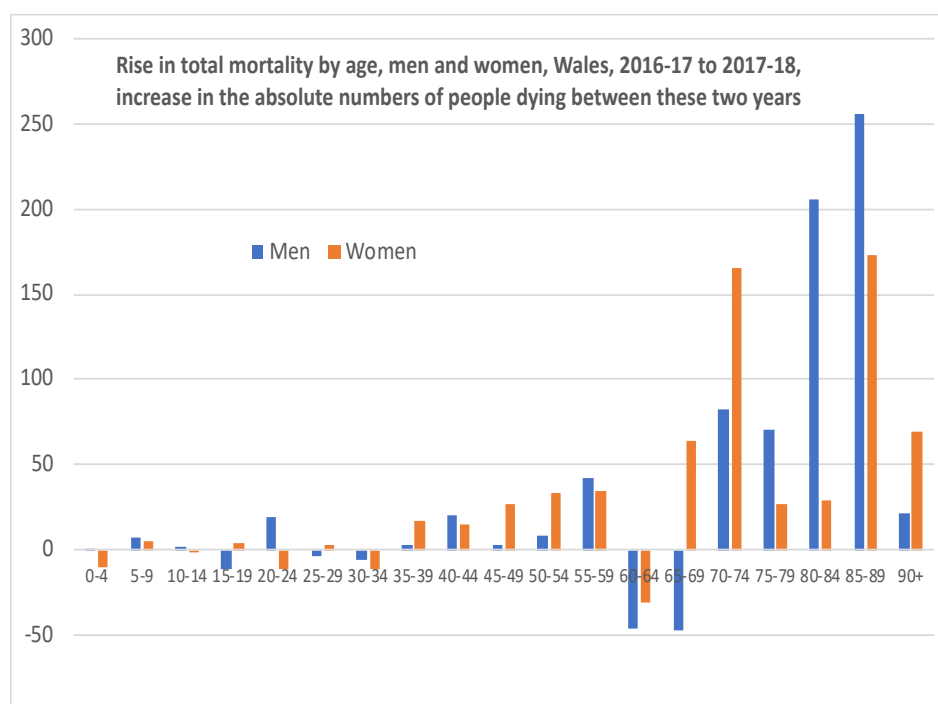


Figure 13: Rise in total mortality by age, men and women, England, 2016-17 to 2017-18, increase in the absolute number of people dying between these two years.

Other key data is hard to find. For countries with data up to 2016, we can see female life expectancy change over 2-year periods. In the UK, this shows a decrease in female life expectancy from 2013-2015 and again from 2014-2016¹⁵. Other countries with decreases in female life expectancy from 2013-2015 are Spain and Australia, but the life expectancy recovered from 2014-2016. For men, the worst effects come later on. For countries with data up to 2016, we can also see male life expectancy change over 2-year periods. Here too, Spain and Australia have decreases in male life expectancy from 2013-2015 that later recover in 2014-2016. However, a key difference is the male life expectancy in the UK which only decreases from 2014-2016¹⁶.

Conclusion

To begin to conclude, it is interesting to look at the age distribution of voting verses rising elderly mortality rates. In the 2019 General election, of the 66 million people living in the UK¹⁷:

- 20 million did not vote or were eligible but not registered to vote • Did Not Vote
- 14 million vote Conservative (365 seats of 650) ●●●●● ●●●●● ●●
Conservative
- 12 million were children (and UK citizens) ● X
- 10 million voted Labour (203 seats) ●●●●● ●● Labour
- 4 million voted Liberal (11 seats) ● Liberal
- 3 million were not UK citizens ● Not UK citizens
- 1 million voted in Northern Ireland (18 seats) ● Nth. Ireland
- 1 million voted Scottish National Party (48 seats) ●● Scottish NP
- 1 million voted Green/Plaid or other (5 seats) ● Green/ Plaid

These 9 groups have been approximately assigned to 11 equal sized age groups in Figure 14.

¹⁵

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/articles/changingtrendsdeathmortalityaninternationalcomparison/2000to2016>

¹⁶

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/articles/changingtrendsdeathmortalityaninternationalcomparison/2000to2016>

¹⁷ <https://www.ipsos.com/ipsos-mori/en-uk/how-britain-voted-2019-election>

Age Group	Main Parties Recipient of Votes; Each square represents c.1 million people				
0-6	X	X	X	X	X
7-14	X	X	X	X	X
15-22	Labour	Labour	X	Did Not Vote	Did Not Vote
23-28	Labour	Labour	Green/ Plaid	Did Not Vote	Did Not Vote
29-35	Labour	Labour	Not UK Citizens	Did Not Vote	Did Not Vote
36-42	Labour	Not UK Citizens	Did Not Vote	Did Not Vote	Scottish N.P.
43-49	Labour	Did Not Vote	Did Not Vote	Liberal	Conservative
50-56	Labour	Did Not Vote	Did Not Vote	Liberal	Conservative
57-64	Labour	Did Not Vote	Did Not Vote	Conservative	Conservative
65-73	Nth. Ireland	Did Not Vote	Did Not Vote	Conservative	Conservative
74+	Did Not Vote	Did Not Vote	Conservative	Conservative	Conservative

Figure 14: Age Distribution of 2019 General Election Voters¹⁸

And some headlines from late 2019:

BBC news – 27 December 2019

“A ‘vulnerable’ woman gave birth in the centre of Cambridge on the day before Christmas Eve, it has been confirmed. Cambridge News reported twins were delivered in Sidney Street, near Trinity College, on 23 December... ‘Accommodation had been provided to her and her partner for several weeks before the birth, along with other practical support to relieve their homelessness. We are not clear why this accommodation was not being used.’”¹⁹

26th February 2019

¹⁸ <https://blogs.lse.ac.uk/politicsandpolicy/young-cosmopolitans-and-ge2019/>

¹⁹ <https://www.bbc.co.uk/news/uk-england-cambridgeshire-50926784>

Homeless deaths: Oxford second worst in country - 33 in 5 years²⁰

“In one electoral ward alone – Carfax – there were 91 premature deaths [2002-2016]. This number had almost doubled since we last looked at these issues in the 1980s. In Carfax, deaths amongst the homeless population accounted for 88% of all deaths under age 65 between 2014 and 2016. The majority of these homeless deaths were males. Homelessness not only cuts short lives; it increasingly dominates the profile of who dies young in Oxford.”²¹

The situation as concerned health in late 2019 and early 2020 in the UK was very bad. No other European country had reported lower life expectancy in 2018 as compared to 2014. Adult social services in the UK had been repeatedly decimated since 2010 with only a fraction of those who kept an eye on the frail elderly employed still by the start of 2020. Public health surveillance had been cut severely. NHS funding had not risen in line with need or inflation and the number of hospital beds, especially intensive care beds, had been cut per 100,000 people. By some estimates more than 130,000 people had died prematurely in the years before 2020 due to austerity.²² Just a small fraction of this number were infants or homeless and otherwise destitute younger adults. Most were out of sight out of mind frail and elderly people. Looking back it is hard to imagine how little we then cared about so many lives. Perhaps because we thought it would not be us.

²⁰ <https://www.oxfordmail.co.uk/news/17458981.homeless-deaths-oxford-second-worst-country---33-5-years/>

²¹ <https://blog.geographydirections.com/2019/12/05/who-dies-young-in-a-rich-city-increasingly-the-homeless/>

²² <https://www.theguardian.com/politics/2019/jun/01/perfect-storm-austerity-behind-130000-deaths-uk-ippr-report>