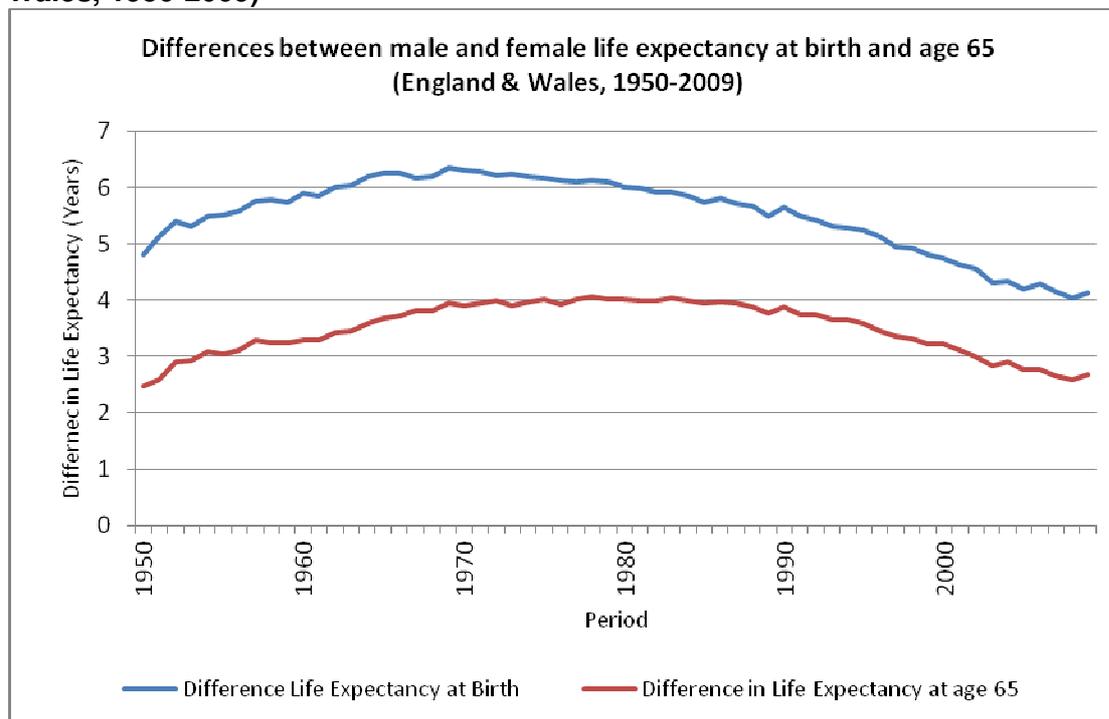


New Report shows the gap in life expectancy by gender is narrowing but will continue to exist

- Women live longer than men, but the gap in life expectancy at birth has reduced from 6.25 years to 4.15 years over the past 50 years
 - Differences such as smoking and alcohol consumption between genders has decreased, contributing to the reduction in life expectancy
- Genetic, hormonal and other biological differences between genders will remain; with women expected to still live longer than men by 1-2 years at age 65

Research brought together for the Longevity Science Advisory Panel's second Report "**Life Expectancy: past and future variations by gender in England & Wales**", examines the narrowing gap in life expectancy between men and women. The report highlights the difference in life expectancy between men and women over the past 170 years. Although life expectancy within England & Wales has increased for both men and women (and women continue to outlive men), the report finds that the gender gap in life expectancy has narrowed over the last 50 years (see chart below).

Differences between male and female life expectancy at birth and age 65 (England & Wales, 1950-2009)



Source: England and Wales. Total Population, Life tables (period 1x1). Males, Females and Total Population. Last modified: 03-Nov-2010, MPv5 (May07). © Human Mortality Database. University of California, Berkeley (USA) and Max Planck Institute for Demographic Research (Germany). (www.mortality.org)

The Report groups the possible drivers important to the difference behind the gender gap in male and females into 3 broad categories: i) environment and lifestyle; ii) deaths due to major disease categories and iii) physiology or genetic makeup.

Over a period of time, the ***Life Expectancy: past and future variations by gender in England & Wales*** Report finds that:

The gender gap in life expectancy had increased from 1850 to 1970s:

Ignoring the effects of the two World Wars, the report finds that the gap between male and female life expectancy at birth peaked at 6.3 years in 1967. The report highlights international comparisons which showed that until the 1970s, general declines in mortality within many industrialised countries have been accompanied by a widening gap in gender life expectancy.¹

Ignoring the effects of the two World Wars, the difference in male and female life expectancy at birth reached a peak of 6.25 years in the period 1965-1969 and the difference at age 65 peaked at 4.01 years in 1980-84. Since then the gaps have narrowed to 4.15 years and 2.69 years respectively in the period 2005-09. Analysis of HMD data by the CMI reveals a contrast between the marked improvement in the 25 years to 2004 compared to previously but again a differential favouring males is apparent.

The gender gap in life expectancy had decreased from 1970s to 2010:

Gender differences in life expectancy narrowed, declining to 4.1 years in 2009. This has been attributed to a change in behaviours such as smoking and alcohol consumption, with more men than women engaged in smoking and alcohol consumption within the last century. One multi-national study estimated that smoking deaths accounted for 40-60% of the gender gap in mortality.² 20% of the gender gap in mortality was attributed to alcohol related deaths.

Future differences in life expectancy between men and women:

In spite of the narrowing of the gender gap in life expectancy, the report finds that a range of genetic, biological and hormonal differences between men and women will limit the extent of the decreasing gap. The report concludes that a gender difference in longevity will persist with a gap of 1-2 years at age 65.

Sir John Pattison, Acting Chair of the Longevity Science Advisory Panel commenting on the report, said: “Despite the recent introduction of gender neutral rates to the insurance sector, our findings show that women continue to live longer than men. This is a gender differential found in most mammals which has been documented in the UK since 1841.

The difference in male and female life expectancy at birth reached a peak of 6.25 years in the period 1965-1969, but developments during the 25 years to 2004 have been dramatic. Yet the gender differential still favours men. The rate of mortality improvement for men aged 40-89 over the last 25 year period was 2.1% per annum compared to 0.5% for the previous 125 years. The corresponding figures for women were 1.7% and 0.8%. Similar trends in both mortality improvement and a narrowing of the gender gap have been observed in many other industrialised countries,

Sir John Pattison continued: “Both nature and nurture play a part, with the powerful effect of social factors being underpinned by basic biological differences. Traditionally, men are the greater risk takers and in respect of accidents and violence, for example, a gender difference is still likely to persist. However, in some other aspects, gender differences are tending to equalise and is having a profound impact on longevity for

¹ *Continuous Mortality Investigation Working paper 39. (2009). A prototype mortality projections model: Part Two - Detailed analysis. Institute of Actuaries and Faculty of Actuaries. © 2009 Institute of Actuaries and Faculty of Actuaries.*

² *McCartney G. et al. (2011). Brief report: Contribution of smoking-related and alcohol-related deaths to the gender gap in mortality: Evidence from 30 European countries. Tobacco Control;20:166-68. doi:10.1136/tc.2010.037929.*

both genders.”

More/...

Factors such as smoking, alcohol consumption, poor diet are some of the major causes of mortality, such as cancer and cardiovascular disease for both genders. There is general agreement that, to date, the rise and fall of tobacco consumption has been a major determinant in the recent reduction in the longevity gender gap.

However, ageing is related to many factors. There is such a significant range of genetic, hormonal and biological differences between men and women which impacts on longevity, that we conclude from our findings in this Report that a gender difference in longevity will persist. At age 65 we estimate that this is probably of the order of 1-2 years.

Any theories attempting to explain gender differences in ageing based on single causes tend to be oversimplified and controversial. The gender gap in human lifespan is profoundly affected by societal and behavioural factors, we believe that raw data exists which could be analysed to eliminate social and behavioural factors and provide a more accurate estimate of the underlying gender gap in longevity. Longevity Science Advisory Panel plan to explore this possibility in the next Report.’

A copy of the report, **Life Expectancy: Past and future variations by gender in England and Wales**, is available to download at www.longevitypanel.co.uk/le-by-gender or by requesting a copy to longevity@landg.com.

Ends

Journalists wanting further information or to arrange an interview with Sir John, Acting Chair of the Longevity Science Advisory Panel or another member of the Panel should contact:

Berni Ryan, c/o Legal & General
01737 375369/ 07788 926790
berni.ryan@landg.com

Notes to editors

The Life Expectancy: Past and future variations by gender in England & Wales is based on the opinions expressed by the authors and is available for general information only.

The longevity Science Advisory Panel, LSAP, was set up by Legal & General to explore the impact that a range of factors may have on future life expectancy in the UK. This includes the drivers that are enhancing life expectancy, for example, medical advances and social change, as well as the inhibitors, such as aspects of lifestyle and delays in the development of treatments. The panel is chaired by Sir John Pattison (Acting) and also consist of Klim McPherson, Steve Haberman and Colin Blakemore.