

CSI 17: Who is at greatest risk of poor health in the UK?

Summary

- Poor self-rated health is least common in British adults who are employed, have higher educational qualifications and work in higher managerial and professional occupations
- Longstanding illness is less prevalent in British adults with higher educational qualifications, but does not vary clearly by occupational social class
- The occupational social class gradient in health is also observed in British children
- Overall self-rated health and the presence of longstanding illness in adults did not follow clear trends between 1977 and 2007
- The number of days lost to sickness in the UK has declined progressively over time

Introduction

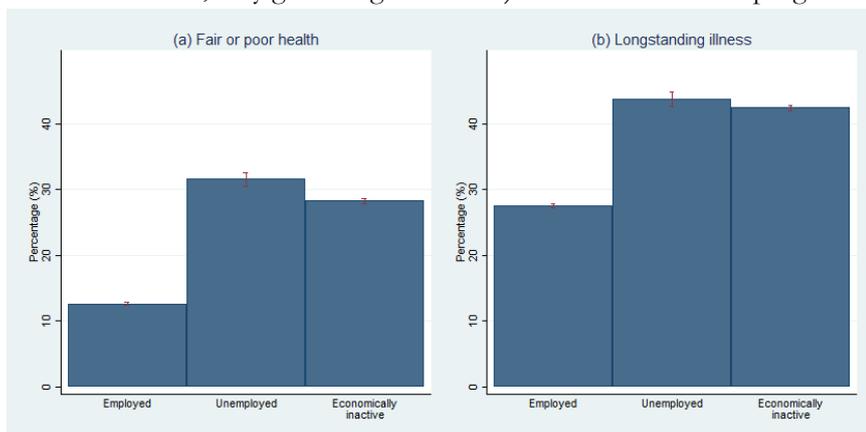
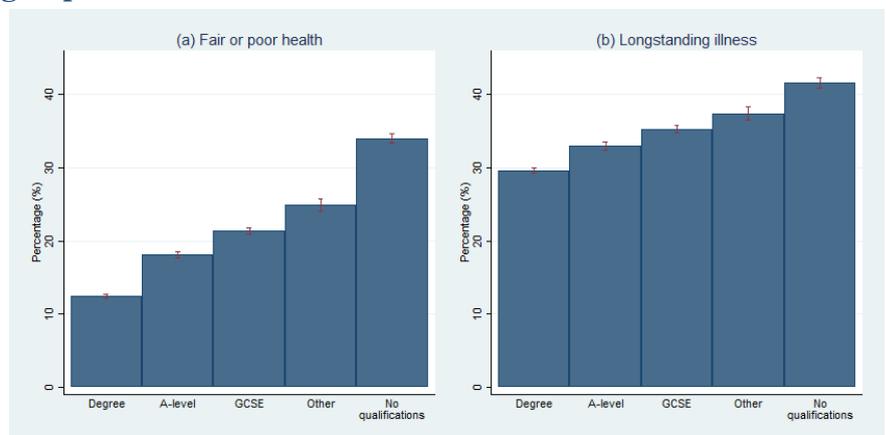
Health is a key determinant of life satisfactionⁱ and quality-of-lifeⁱⁱ. Beyond the negative consequences of poor health to individuals, impaired health is bad for the economy through direct costs including healthcare expenses, alongside indirect costs such as absence from work and reduced tax incomes. Good health is not shared equally by all people and despite significant efforts to reduce health inequalities in the UK, systematic differences in health remain between groups.

How does health vary between groups in the UK?

Figure 1: UK adults with no qualifications are at greatest risk of (a) fair or poor general health, and (b) longstanding illness, 2009-2014

Source: *Understanding Society*

One key way of assessing people's health is by asking them to rate their overall health. This reveals clear differences in health between social groups in the UK. Figure 1 shows that the prevalence of fair or poor general health (compared with excellent, very good or good health) in the UK increases progressively for people with lower educational qualifications



in the UK increases progressively for people with lower educational qualifications: people with no educational qualifications are nearly three times as likely to report poor health as those with a degree. The prevalence of longstanding illness or disability follows a shallower education gradient.

Figure 2: Employed adults in the UK have the lowest risk of (a) fair or poor general health, and (b) longstanding illness, 2009-2014

Source: *Understanding Society*

Figure 2 shows how health in UK adults varies by economic activity. Poor health is more prevalent among people who are unemployed or economically inactive, compared with employed people. The prevalence of longstanding illness also varies by economic activity, where employed people have a lower prevalence of longstanding illness than unemployed or economically inactive people. These figures should however be interpreted with caution because the economically inactive group includes people defined as too ill to work. It should therefore not necessarily be concluded that economic inactivity causes poor health as this association also operates in the opposite direction.

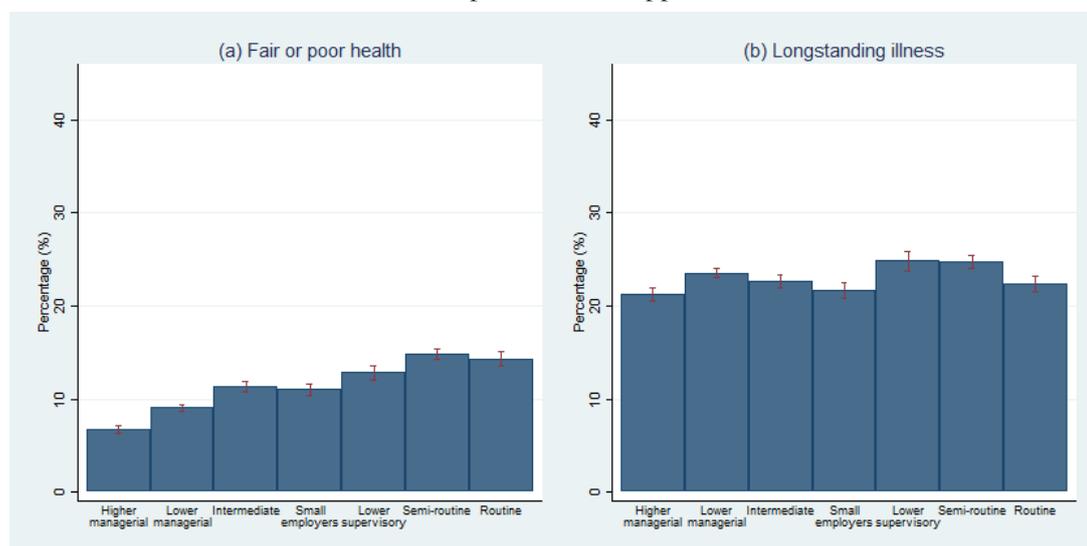


Figure 3: UK adults in higher managerial and professional jobs have the lowest rates of (a) fair or poor general health, while (b) longstanding illness does not vary clear by occupational social class, 2009-2014 *Source: Understanding Society*

Variation in health by occupation for employed adults in the UK is displayed in Figure 3. The proportion of people reporting poor health is smallest in the managerial classes, and increases progressively in the lower occupational classes. Despite this clear gradient, poor health is far less common in employed people than those who are unemployed or economically inactive (see Figure 2). The occupational gradient in longstanding illness does not vary clearly by occupation among the employed, but like for overall health, longstanding illness is less prevalent in employed than unemployed or economically inactive adults. Comparing Figures 1-3, there are clear social gradients in overall health by education, economic activity and occupation. This gradient is twice as large for economic activity as education and occupation, suggesting that being unemployed or economically inactive is especially detrimental to overall health. In contrast, longstanding illness shows a clear education gradient and some association with economic activity, but is not clearly patterned by occupation.

Technical details

There are several ways to measure health. Asking people to rate their overall health is a common method, and overall self-rated health is a strong predictor of illnessⁱⁱⁱ, use of health services^{iv}, and mortality^v. However, this measure has some limitations: it is not definitively known how people assess their general health, so differences in self-rated health may not always reliably capture differences in underlying health. The estimated prevalence of poor health also varies according to the response options used, and changes in response options over time means that we do not have comparable data on self-rated health after 2007. The presence or absence of longstanding illness offers a more clinical conceptualisation and may be more reliable as it is more likely to relate to clinical diagnoses. Measures of sickness absence (Figure 9) and doctor consultations (Figures 6 and 10) are similarly potentially more objective but can still be influenced by access to and use of healthcare alongside attitudes towards ill-health.

A further limitation is that survey coverage varies between datasets, with some datasets covering Great Britain and others including the entire UK. Figure captions provide information on survey coverage. Poor health is more common in older people and varies between men and women, so all values have been standardised by age and sex to facilitate clear comparisons.

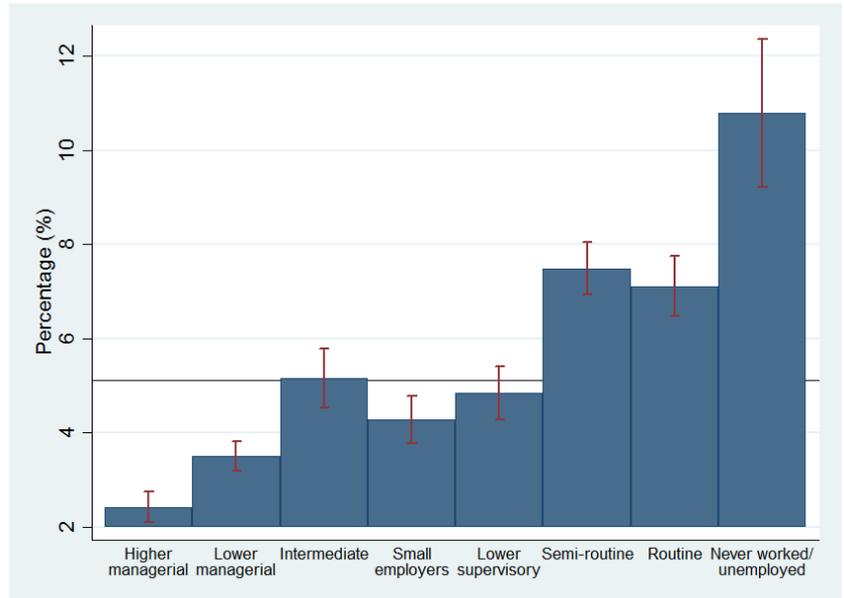
How healthy are children in Great Britain?

Figure 4: Children in Great Britain whose parents never worked or are long-term unemployed have the highest rates of bad general health, 2008-2013

Sources: Health Survey for England, Welsh Health Survey, Scottish Health Survey. Notes: Children aged 0-15

The overall health of children in Great Britain also follows a social class gradient. Figure 4 shows the average risk of fair, bad or very bad general health by their household's social class and the horizontal line shows the total proportion of children with bad general health (5.1 per cent). Bad health was significantly

less likely than average among children whose parents worked in managerial occupations and small employers, and significantly more likely among children whose parents worked in semi-routine or routine occupations. Children whose parents had never worked or were long-term unemployed were the most likely (10.8 per cent) to have bad health. The vulnerability of this group is also observed elsewhere^{vi}. Figures 1-4 demonstrate that health in both adults and children follows a clear occupational gradient. However, slightly different measures were used to assess health in adults and children, so while it is appropriate to compare the patterns of poor health by occupation between adults and children, the size of absolute differences in poor health may not be comparable between adults and children.



How healthy are older people in the UK?

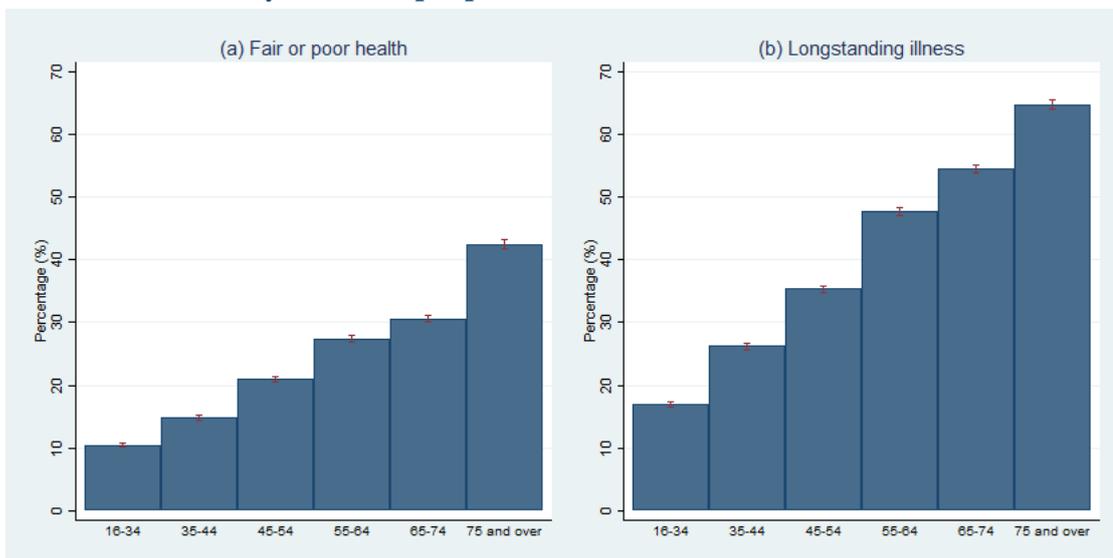
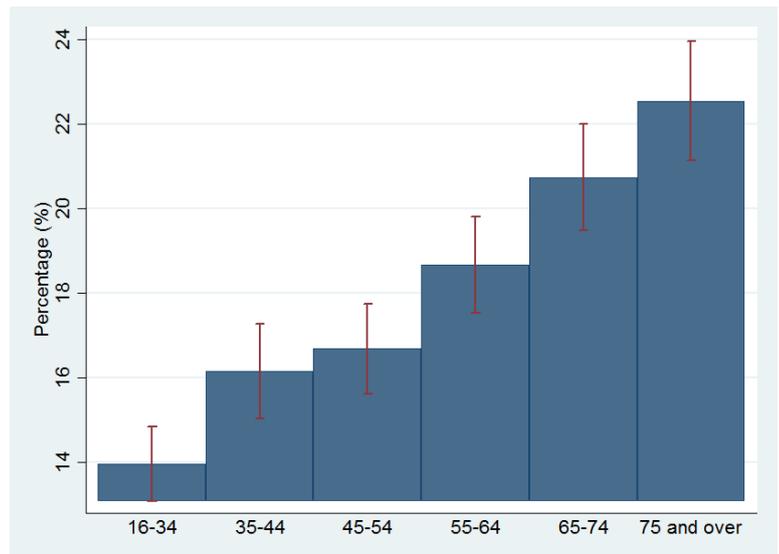


Figure 5: The oldest UK adults have the highest risk of (a) fair or poor general health, and (b) longstanding illness, 2009-2014 Source: *Understanding Society*

Figure 5 shows variation in health by age for UK adults. The prevalence of both poor overall health and longstanding illness display the expected stepwise increase with age. The age gradient in poor health is slightly greater for overall health than longstanding illness and the prevalence of poor overall health displays a particular increase in people aged 75 and older, suggesting that deteriorations in overall health accelerate at older ages.

Figure 6: The oldest adults in Great Britain are most likely to have consulted a doctor in the past fortnight, 2008-2013 Sources: *Health Survey for England, Welsh Health Survey, Scottish Health Survey*

Figure 6 likewise shows that use of health services in Great Britain increases progressively with age. People aged 75 and older were fifty per cent more likely to have consulted a doctor in the previous fortnight than those aged 16 to 34. These differences are likely to reflect both genuine differences in underlying health and varying attitudes towards health and health-seeking behaviours.



How is our health changing over time?

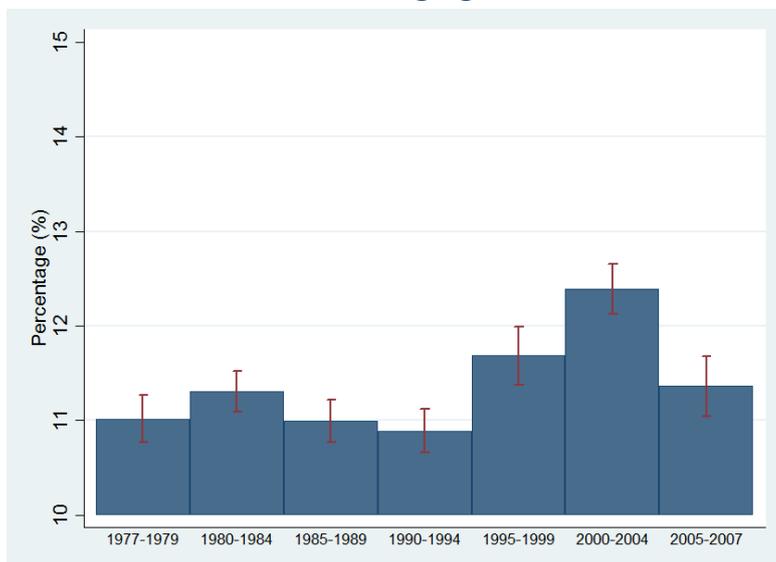


Figure 7: The proportion of adults in Great Britain reporting 'not good' general health in the past 12 months does not show clear trends between 1977 and 2007

Source: *General Household Survey*

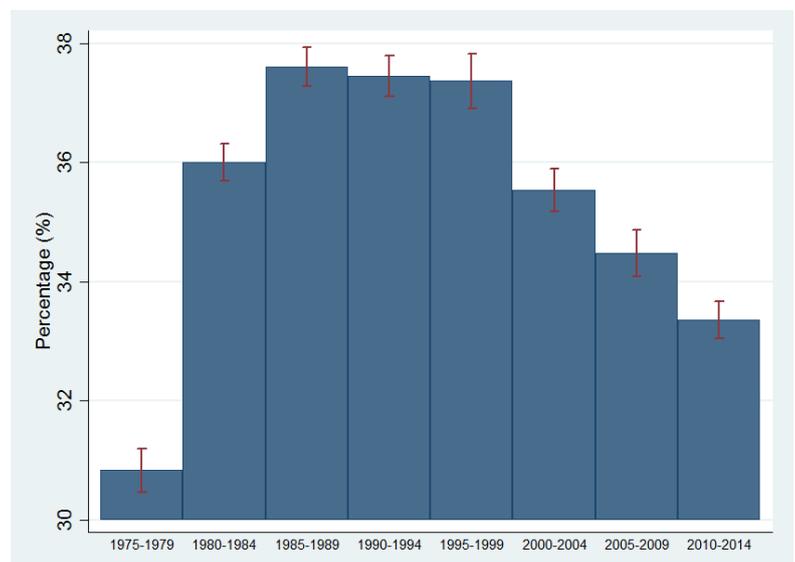
Figure 7 shows the proportion of adults in Great Britain reporting 'not good' overall health between 1977 and 2007. This reveals comparable stability in overall health throughout this period. Between 11 and 12 per cent of people reported 'not good' overall health between 1977 and 2007, with the only significant change being an increase in 'not good' health to 12.4 per cent in 2000-2004. Because of changes to the answers people can give

after 2007 it is not possible to make direct comparisons of overall health after 2007.

Figure 8: The proportion of adults in Great Britain reporting a longstanding illness, disability or infirmity increased before declining again between 1975 and 2014

Sources: *General Household Survey (1975-2009), Understanding Society (2010-2014)*

Figure 8 demonstrates significant changes in the prevalence of longstanding illness between 1977 and 2014, increasing from 25 per cent in the early 1970s to 37.6 per cent in 1985-89 before falling to 33.9 per cent in 2010-14. Because we have controlled for age, these changes do not reflect population ageing.



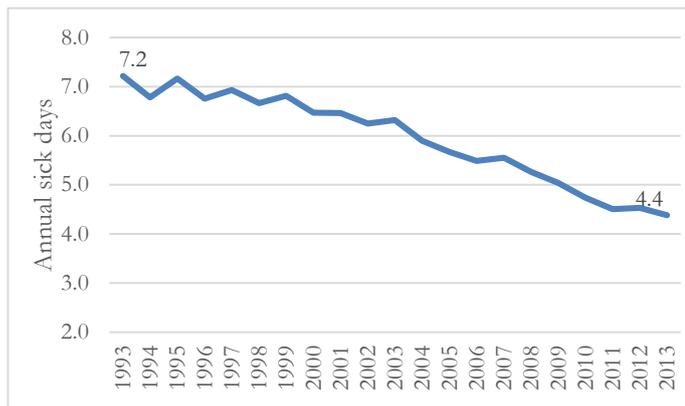


Figure 9: Sickness absence in the UK reduced progressively between 1993 and 2013

Source: Labour Force Survey

Another way of assessing overall health is through absence from work, which is less likely to be influenced by differential perceptions of health. As can be seen in Figure 9, the average number of days lost due to sickness for each person in employment has nearly halved over the past 20 years, suggesting that health among employed people in the UK has improved over this period.

These patterns are seen in both men and women, although women consistently have higher rates of sickness absence. A more detailed breakdown of the reasons for sickness absence reveals no clear trends over time.

Figure 10: The proportion of adults in Great Britain who consulted a doctor in the past fortnight increased between 1975 and 2013 Sources: General Household Survey (1975-2009), Health Survey for England, Welsh Health Survey, Scottish Health Survey (2010-2013)

A further way to assess people's health is by considering their use of health services. Figure 10 shows that the proportion of adults who had consulted a doctor in the past fortnight increased progressively throughout the 1970s and 1980s before levelling off from the 1990s onwards.

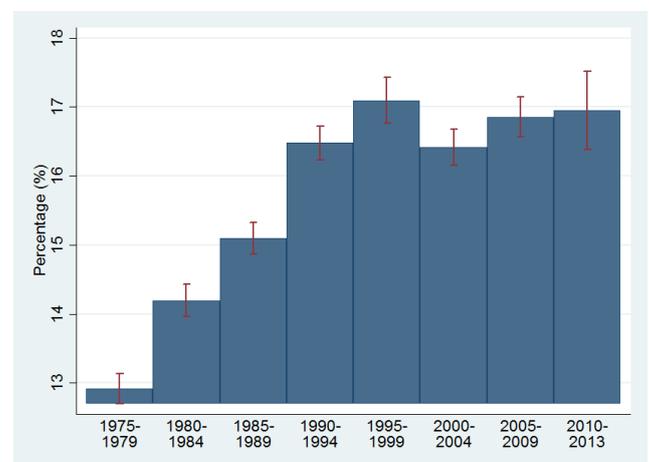
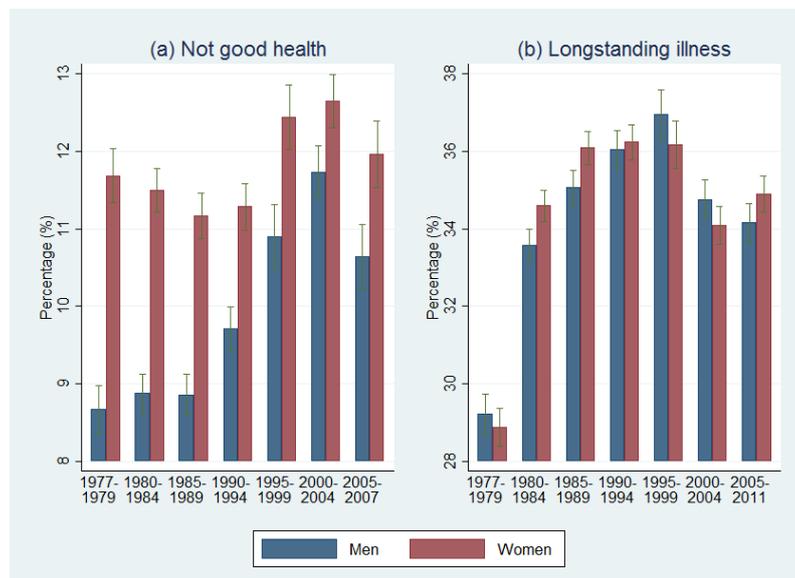


Figure 11: Men and women report large differences in (a) 'not good' general health between 1977 and 2007, but not in (b) longstanding illness, disability or infirmity between 1977 and 2011

Source: General Household Survey

Figure 11(a) shows that in Great Britain, women are consistently more likely to report 'not good' health than men. These patterns also show some interesting changes over time. The proportion of women reporting 'not good' general health remained fairly stable between 1977 and 2007, with a small increase towards the end of this period. In contrast, the proportion of



men reporting 'not good' health has increased progressively over time since the early 1990s, narrowing the differences in overall health between men and women. In contrast, Figure 11(b) shows that there are no clear sex differences in the prevalence of longstanding illness. A larger proportion of women than men had a longstanding illness in the 1980s but these differences are not seen in other time periods. This suggests that the increase in the proportion of men reporting 'not good' health might reflect changing perceptions of health instead of underlying changes in health over time.

What can we conclude?

It is clear that good health is not shared equally by all people. In the UK there are clear inequalities in overall health and longstanding illness according to education, economic activity and occupation. These differences are clearer for overall self-rated health, suggesting that people's perceptions of their health do not always correspond perfectly with more objective outcomes. Like for adults, children's health also varies according to their parents' occupational class, which could have long-term consequences for later health. As expected, poor health – as measured as overall self-rated health, longstanding illness or doctor visits – becomes progressively more prevalent at higher ages.

Trends in health over time are much more difficult to assess. The prevalence of 'not good' health has remained fairly stable over the past forty years, while the proportion of people reporting a longstanding illness has shown larger changes over time, and is higher in 2014 than 1975. This contrasts with rising life expectancy over this period^{vii} and reductions in sickness absence from work. Coupled with increasing use of health services, this suggests that health has improved over time, and that rising incidence of longstanding illness may reflect increased use of health services and greater emphasis placed on health over time, instead of underlying changes in health.

Changing perceptions of health are likely to contribute to these inconsistent results. Over the past forty years, an increasing proportion of men reported 'not good' general health, but this did not correspond to trends in longstanding illness over this period. One interpretation of this observation is that a possible reluctance by earlier cohorts to report poor health is gradually declining. This could reflect the combined factors of improved health literacy, greater contact with health services, and changing attitudes over time.

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Publication date: November 2015

ⁱ Strine, T. W., Chapman, D. P., Balluz, L. S., Moriarty, D. G. and Mokdad, A. H. (2008) 'The associations between life satisfaction and health-related quality of life, chronic illness, and health behaviours among U.S. community-dwelling adults', *Journal of Community Health*, 33, pp. 40–50.

ⁱⁱ Alonso, J., *et al.*, (2004) 'Disability and quality of life impact of mental disorders in Europe: Results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project', *Acta Psychiatrica Scandinavica*, 109, pp. 38–46.

ⁱⁱⁱ Eriksson, I., Undén, A.-L., & Elofsson, S. (2001). Self-rated health. Comparisons between three different measures. Results from a population study. *International Journal of Epidemiology*, 30(2), 326–333.

^{iv} Miilunpalo, S., Vuori, I., Oja, P., Pasanen, M., & Urponen, H. (1997). Self-rated health status as a health measure: The predictive value of self-reported health status on the use of physician services and on mortality in the working-age population. *Journal of Clinical Epidemiology*, 50(5), 517–528.

^v Ganna, A., & Ingelsson, E. (2015). 5 year mortality predictors in 498 103 UK Biobank participants: A prospective population-based study. *The Lancet*, 386(9993), 533–540.

Idler, E. L., & Benyamini, Y. (1997). Self-rated health and mortality: A review of twenty-seven community studies. *Journal of Health and Social Behaviour*, 38, 21–37.

^{vi} See the CSI briefing note on class inequalities in education, available at: http://csi.nuff.ox.ac.uk/wp-content/uploads/2015/03/CSI_11_Class_Inequalities.pdf

^{vii} See the CSI briefing note on life expectancy, available at: http://csi.nuff.ox.ac.uk/wp-content/uploads/2015/03/CSI_1_LifeExpectancy.pdf

