

# Health inequalities in the older population

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## Introduction

The burden of ill-health is carried by older people. Over 80% of all deaths in England and Wales occur among people aged 65 and over, with a further 8% among people aged 55-64. Two thirds of the population with a limiting long-term illness or disability are aged 55 and over. This means that strategies to tackle health inequalities must address health inequalities in later life. However, most health inequalities research concentrates on younger people.<sup>1</sup>

Our project is one of two in the Health Variations Programme to focus explicitly on health and health inequalities among older people. We drew on two data sets, the Retirement and Retirement Plans Survey<sup>2</sup> and the Health Survey for England (HSE). The Retirement Survey sheds light on health inequalities in the 55 to 75 age group; the HSE allowed us to examine health inequalities in people aged 75 to 84. As the HSE does not include people in institutions and around 1 in 5 of those aged 85 and over live in institutions, we did not extend our analysis beyond age 84.

We report on two aspects of our study. Firstly, we examine health inequalities in the two age groups and the factors which contribute to them. Secondly, we look more closely at the self-reported measures of health used in our analyses and the degree of correspondence between these subjective measures and more objective indicators of health status.

## Health inequalities among people aged 55 to 75

The Retirement Survey revealed clear evidence of health inequalities. These were captured both in conventional measures of socio-economic status, based on social class, education and income, and on measures of material deprivation (Figure 1).

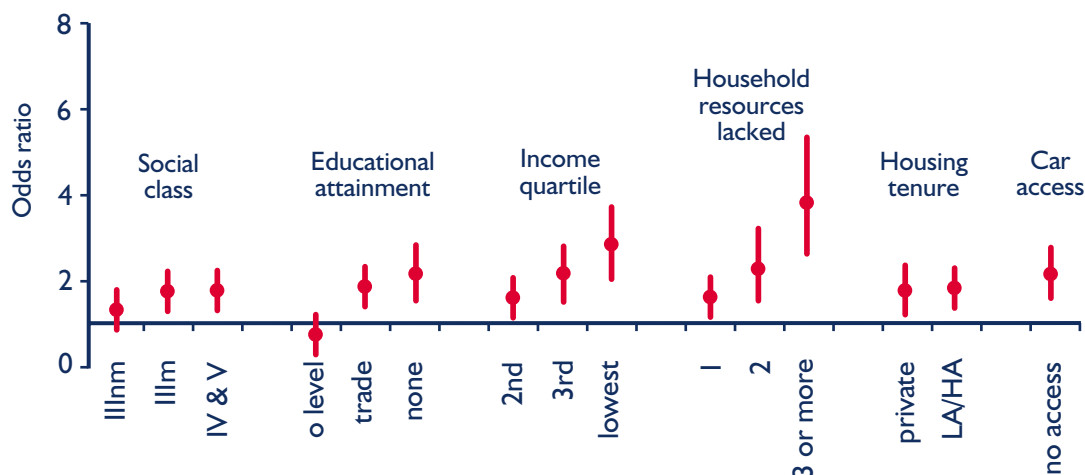
The deprivation measure included in Figure 1 was based on respondents' reports of how many of a list of nine household amenities they lacked because they could not afford them. Our multivariate analyses indicated that those who had followed more disadvantaged pathways through their adult lives, as marked out by longer periods of unemployment, earlier age at marriage and more children, were at greater risk of reporting ill-health and long-term illness. Adverse life events, like the death of a child and being sacked from a job, were also risk factors for poorer health.<sup>3</sup>

## Health inequalities among people aged 75 to 84

The HSE enabled us to look in more detail at how lifecourse factors and current circumstances influenced health in older age. We used height and educational qualifications as indicators of characteristics acquired in early life (height has been shown in a number of studies to be strongly associated with childhood circumstances) and housing tenure and income support (a means-tested income supplement paid to those with very low incomes) as indicators of socio-economic circumstances. We also included marital status and perceived social support as indicators of psycho-social resources.

These measures of early life factors, current socio-economic circumstances and current psycho-social resources revealed strong gradients in the age-adjusted prevalence of bad/very bad health. For example, shorter stature and lack of educational qualifications were associated with poorer health, and more tenants than owner-occupiers reported bad health. With respect to social support, the prevalence of bad health among men was highest among the divorced and lowest among the married. Among women, however, prevalence was lowest among single women and highest

**Figure 1:** Odds ratios (95% confidence intervals) of fair or not good health, men aged 55-69, 1988/9



Source: Analysis of Retirement Survey

**Table 1:** Odds of poor health among men and women aged 65-84 by receipt of income support (IS)

Health Indicator	Men		Women	
	Does not receive IS	Receives IS	Does not receive IS	Receives IS
Reports health as bad or very bad	1.0	2.78** (2.06-3.76)	1.0	2.24** (1.76-2.84)
Longstanding illness	1.0	1.34* (1.04-1.73)	1.0	1.58** (1.32-1.90)
2 or more physical complaints	1.0	1.37* (1.06-1.75)	1.0	1.40** (1.18-1.66)
Psychiatric morbidity (GHQ score)	1.0	1.80** (1.31-2.47)	1.0	1.28* (1.04-1.59)

Source: HSE \*P< .05 \*\*P< .0001 (Confidence intervals in brackets)

among the widowed. For both men and women in all marital status categories, those reporting a lack of social support had worse health; among men, however, the differences were not large.

Our multivariate analyses examined the contribution of all these factors, together with age and smoking status. We examined a range of health outcomes, including self-reported health, longstanding illness, number of physical complaints and minor psychiatric morbidity (as measured by the General Health Questionnaire). Our results suggest that early life factors, current socio-economic circumstances and social support were all associated with indicators of health. However, the strongest and most consistent relationship was between poverty, as measured by receipt of income support, and poor health. Table 1 shows the increased odds of poor health for those in receipt of income support, after taking into account age, smoking, education, height, marital status, perceived social support and, in the case of GHQ, number of physical conditions (there is a known strong relationship between physical and mental health).

### Health expectations and health inequalities

Much of our research was based on people's reports of their health status. There is some suggestion that these vary according to people's health expectations. For example, although mortality rates in older age groups have been falling, the proportion of older people who report longstanding illnesses has been increasing. One possible explanation is that, as people become more aware of their health and less resigned to limitations, they have become more likely to report health complaints. Differences between social groups in health expectations may influence reporting of health status. If so, then the measurement of health inequalities based on self-reported indicators of health will not be accurate.

To find out if this was the case, we analysed the extent of concordance between 'objective' and 'subjective' measures of health. The self-reported measures we used in this analysis were long-term illness and general health status. The objective indicators were hypertension, taking more than three prescribed medications and respiratory

function. We measured concordance by calculating an odds ratio; that is the odds of self-reported poor health divided by the odds of poor health indicated by the objective measure. The higher this ratio the greater the concordance. We found there were strong age gradients: people aged 55-59 with an objective indicator of poor health are more likely to report their health as bad than those in older groups. There is also a socio-economic gradient, with those with higher educational qualifications having a lower threshold for reporting poor health (or, to put it the other way, higher health expectations). For example, among those with below normal respiratory function, the odds of reporting a longstanding illness were 4 among those with a degree (i.e. those with poor respiratory function are four times as likely to report long-term illness than those with normal or good respiratory function). Among those with no qualifications, the odds were 1.6. Similarly among those taking more than 3 prescribed medicines, the odds of reporting a long-term illness were 30 for those in Social Class I compared with 4 for those in Social Class V. The implication of this finding is that health inequalities in older age groups may be even greater than reported in some studies.

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### References

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