sick, who had particularly high mortality in 1981,[10] suggests that men who were seeking work in 1981 excluded many with serious health problems in 1981. Among younger men this trend was less evident, partly because it was based on only a few deaths and partly because fewer men were reported as permanently sick since at this age serious health problems are less common than in middle age.

We therefore conclude that the standardised mortality ratio of 147 at ages 16-64 in 1983 is the best measure we have of overall mortality among men who were seeking work in our sample. A comparison with the equivalent analyses of those who were seeking work in 1971 shows that a similar pattern in fact operated shortly after that census. Despite an effect of social class distribution on the relatively small numbers of deaths at younger ages, correcting for socioeconomic characteristics had little effect on this overall figure.

Detailed comparisons of cause specific mortality by age and year of death also indicate similar patterns for the 1971 and 1981 cohorts.[10] These similarities include excess mortality from suicides and other accidents, poisonings, and violence at younger, but not at older, ages; a rising standardised mortality ratio for lung cancer at older ages, from low in 1981 and 1971 to high in 1983 and 1973; and a raised ratio for ischaemic heart disease at older ages in the final year of follow up but not in earlier years.

Women who were resident in private households and married to men aged 16-64 who were seeking work in 1981 had a standardised mortality ratio of 107 for 1981-3, with higher levels for lung cancer and ischaemic heart disease. None of these ratios, however, were significant at the 5% level, reflecting the fact that the numbers of deaths available for analysis from so short a follow up prevent us drawing firm conclusions about these women. It is notable, though, that there was also no clear excess in mortality in 1971-3 among the wives of men who were seeking work in 1971, although their mortality for 1971-81 was significantly raised. Thus it will be several years before these data can provide strong evidence that spouses of men who were unemployed in the 1980s suffer adverse health effects, as suggested by the longer period of follow up of the earlier group.

In a separate project we used the longitudinal study to indicate the sociodemographic origins in 1971 of men who were unemployed in 1981 and of the circumstances in 1981 of those who were unemployed in 1971.[15] The unpublished findings show that those who were out of work in 1981 were drawn disproportionately from socially disadvantaged sections of society in 1971, such as the unemployed, the unskilled, local authority tenants, and those who were separated and divorced. The risk of unemployment in England and Wales in 1981 was greater for men in the north, west, and central regions than for those in the south and the east. Hence it should not be surprising that some of the excess mortality found for unemployed men is associated with their sociodemographic circumstances.

The experiences of those who survived the decade between censuses shed most light on why there is still a substantial excess in mortality after standardising for socioeconomic circumstances. Men who were unemployed in 1971 were more likely than those who were in employment to experience in the following decade further unemployment, downward social class mobility, loss of owner occupied housing, and marriage breakdown. Not only are low sociodemographic states associated, perhaps indirectly, with higher mortality, but adverse changes in these characteristics have been implicated in conferring particularly high risks of mortality.[16] This seems to suggest that there is a descending spiral in which some people become increasingly at risk from one form of disadvantage after another. Unemployment may not be the principal link in this chain, but it is clearly an important link.

Conclusions

Our results relating to men who were seeking work in 1981 point in the same direction as the equivalent results for men who were seeking work in 1971. The high mortality which we observe in 1981-3 among men seeking work in 1981 who were aged 16-44 at death, and also in 1983 among those aged 45-64 at death, is not explained by either the pre-existing health of these groups or their socioeconomic state before unemployment. Also the postcensus mortalities of women who were married to men who were seeking work are similar in the two time periods.

A follow up longer than three years is needed, however, before the results for the 1980s have a strength and validity of their own. The figures for men aged 45-64 at death are dominated by strong health selection effects because those who were both out of work and had health problems tended to classify themselves as permanently sick and not as seeking work. This applies even when their health problems arose after they became unemployed (but before follow up started in this study). For younger men and for the wives of men who were seeking work the analyses are restricted by the small numbers of deaths occurring in so short a period. We hope to analyse in the next two years information on deaths up to 1985, which will help to some extent, but the analysis will become more valuable as the length of follow up increases still further.

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Corrections

Recent trends in mortality associated with abuse of volatile substances in the UK

We regret that an error occurred in this short report by Dr Anderson and others (6 December 1986, p 1472). The first sentence of the third paragraph of the methods and results should read: "In 53% of cases death was attributed to the direct toxic effects of the substance."

The fortification spectra of migraine

We regret that in this article by Dr Gordon T Plant (20-27 December 1986, p 1613) figures 3 and 4 were transposed.