

## Demography and Migration

Tony Warnes

Michael Anderson and Fred Ashwood, Projection of mortality rates for the elderly. *Population Trends*, 42 (1985), 22–29.

The title was found initially misleading in that the article is actually a useful review both of our understanding of past trends in the mortality-rates from three dominant causes of death in Britain and the extent to which this understanding might be employed in cause and age-specific projections of mortality. In considering which specific causes of death might usefully be projected on anything but a trend or constant basis, Anderson and Ashwood examine the ten leading causes of death and conclude that: (a) ischaemic heart disease should be examined on its own, for no convincing evidence exists to indicate departures from recent trends, (b) a specific model relating past and present smoking to future lung cancer is likely to be useful, (c) it may be possible to relate bronchitis, asthma and emphysema to past and anticipated levels of environmental pollutants, (d) inadequate evidence exists to indicate any departure from the steady recent rates of mortality from malignant diseases apart from lung cancer, and (e) all other diseases should be aggregated and past trends extrapolated.

The article presents a detailed study of the first three of these causes which, in 1984, accounted for 52 per cent of male deaths and 36 per cent of female deaths to those aged 60–84 years. Sex-specific mortality rates for five-year age groups from 65 to 84 years were examined for the period 1951 to 1984 and projections constructed for 2021–25.

The projections for deaths from ischaemic heart disease are arbitrarily selected low (zero), medium (20) and high variant (40) percentage reductions in mortality from this cause by 2025. The projections for mortality from lung cancer are both more interesting and based on a range of empirically validated models, for which the article provides a useful summary review. Variant assumptions about the level of tobacco smoking in the near future are employed to generate alternative optimistic and pessimistic projections for 2021–25. Both show very substantial decreases in the male cause-specific mortality rate from the 1980s and even more substantial increases in the rates for females aged 75 years or more.

Past trends in bronchitis, emphysema and asthma late-age mortality are quite different from those for lung cancer, for there is no evidence of a cohort change as with the clear smoking-related changes of lung cancer, and the curves for the two sexes are very different. The authors suggest that the different trends for mortality in the two sexes reflect

a combination of differences among the birth cohorts adopting high smoking levels and an interaction of this variable with exposure to atmospheric pollution. Inadequate data are available to fit a model that allows for such a combination of risk factors, and the authors argue that the simpler smoking effect model used for lung cancer does not fit the trends in bronchitis mortality in either males or females. Their projections for males extrapolate the substantial declines in mortality since 1951 for all age groups, resulting in an approximate halving of the mortality rate. In great contrast, for female mortality no change in the 1980s age-specific rates is assumed.

The article concludes with a short review of the current theoretical debate concerning relationships between morbidity and mortality. Its main value, however, is the summary presentation in a relatively accessible form and title of the technical forecasting and actuarial calculations and debates which variously inform and alarm government planners and spending departments.

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## Education

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Gilbert J. Leclerc, Understanding the Needs of Older Adults: a New Approach. *Educational Gerontology*, 11 (1985), 137–144; R. David Owens, Nature and Amount Learned by Older Adults, from a Documentary Program. *Educational Gerontology*, 11 (1985), 9–28; Mary M. Seguin and Polly F. McConney, Team Building and Older Volunteers, *The Journal of Volunteer Administration*, 3 (Spring 1985), 3, 39–46.

Three recent papers from North America link together issues of educational need, informal educational sources and the notion of team-based education and training in the development of opportunities for older volunteers. Each topic links directly to issues currently under debate in the field of learning opportunities for older people in the United Kingdom.

A new approach to educational needs assessment of older adults is described by Gilbert J. Leclerc. In terms of educational theory the hypothesis which the study sought to test was the idea that educational need is dictated more by an awareness of gaps and shortcomings in life rather than by physical circumstance. Twin assumptions underpin the study. The notion that learning abilities do not deteriorate with age,