

Editorials

Europe and health services research: systematic reviews and feedback from readers

I am very pleased that colleagues from continental Europe have accepted my invitation to join the reconstituted Editorial Board of this Journal. We now have members from Spain, Italy, The Netherlands, and Scandinavia, and expect others to join us soon. From June 1993 each number of the Journal will contain a guest editorial from one of these European colleagues telling us about health services research and other applied epidemiological work in their country or region.

I should point out that neither the inclusion of European colleagues nor the emphasis on health services research is in the least new. In the first number of this Journal (then called the *British Journal of Social Medicine*) in 1947 the editors wrote that they were 'anxious to keep in close touch with centres of social medicine in other parts of the world'. The General Advisory Board which they had already formed included in that first number colleagues from Belgium, Denmark, France, Hungary, Italy, The Netherlands, Poland, Sweden, the United States, and Yugoslavia. The first volume in 1947 also included 'an attempt to estimate the value and limitations of routine school medical inspections'¹ together with an article on the nutritive value of diets provided to nursing mothers while in hospital² which had a concluding section on 'the chief deficiencies and the means for their improvement'. The second volume—in 1948, the year in which the British National Health Service was begun—included articles on bed-states in Australia, New Zealand, and Canada³ (discussing length of stay and waiting lists, including both numbers of patients and waiting times), hospitals in Sweden,⁴ and the medical system in the United States.⁵

One fundamental aspect of health services research is the evaluation of earlier relevant research, published or unpublished. Colleagues from the Cochrane Centre in Oxford will also be contributing to several numbers of this Journal in 1993, looking in particular at ways of standardising procedures for tracing and assessing previous work and for presenting the results of these reviews. We will continue our policy of commissioning reviews as well as accepting review articles that are offered to us, but we will endeavour to present *structured abstracts* for all these articles in which (for example) authors will explain the *methods* by which papers and their conclusions were included in or excluded from the overview. While acknowledging (to our publishers and printers) the long deadlines and other publishing constraints of a bi-monthly journal, I propose to reserve space for rapid responses and comments (in letter form) from readers on these review articles (and other papers) in order to promote increasing quality in our attempts at evaluation.

STUART DONNAN
Editor

- 1 Gordon I. School medical inspections, their value and limitations. *British Journal of Social Medicine* 1947; 1: 238–50.
- 2 Cruickshank EWH, Stewart CP. Diets in maternity hospitals. *British Journal of Social Medicine* 1947; 1: 182–96.
- 3 Padley R. Bed-states in the Dominions. *British Journal of Social Medicine* 1948; 2: 45–52.
- 4 Dahlberg G. The Swedish bed-state. *British Journal of Social Medicine* 1948; 2: 53–4.
- 5 McKeown T. American medical services. *British Journal of Social Medicine* 1948; 2: 77–105.

Ageing and later life

The numbers of older people are increasing throughout the world. Although high birth rates make the elderly *as a percentage of their populations* seem relatively small in China, India, and much of Africa, where only 2% to 6% are aged 65 years or more, a majority of people in this broad age 'group' live in the developing world. Their numbers are set to grow significantly in the next 20 years.¹ Even in the OECD countries and in those other countries where total population levels are now more stable, the proportion of the population that is aged 65+ is still growing. In Britain, this total group now stands at about nine million and will be fairly steady for the next 20 years before the country witnesses a further growth as the post war 'baby boomers' reach retirement age. As in other developed industrial countries however, the major growth in the foreseeable future is in the population of very old people. Those aged over 85 account for most of the growth among 'the

elderly' over the next 20 years, rising from 865 000 to at least 1.15 million by 2001.²

It has proved notoriously difficult to predict future population patterns reliably. For example, US demographers in the 1940s so seriously underestimated improvements in mortality rates that occurred in the following decades that 1990 actual figures for people aged 85+ proved to be more than twice the expected number.³ This is important as numbers of old people obviously reflect a combination of birth rates 60 to 100 years earlier and survival rates during life. We have fairly reliable data on the former but the latter has proved elusive to predict, while actual numbers in a given geographical area are also affected by migration patterns throughout life. The projected figures cited above may be underestimates if mortality rates among the old fall faster than expected. Meanwhile the implications of these demographic data on

costs of health and social care may vary, depending not only on mortality and morbidity but also on the availability of informal care and the costs of paid carers at a time when the impact of divorce rates, mobility, household size, and financial pressures will affect both older populations and their potential family carers.

Optimistic commentators, led by Fries,⁴ have asserted that later life is becoming more about active healthy living in the period before people achieve the 'natural human life-span'. This rewarding post work period of learning, participation, grandparenthood, and leisure has been characterized as the 'third age'. By contrast, others insist that this picture is too rosy: not only does the third age still involve financial struggle for many people, it is merely a stage that has been interjected before a last phase of life (or fourth age), in which ill health and frailty predominate as never before.⁵

Both assertions seem to be over simplifications. Clearly, the two phases take different forms and last different lengths of time in different individuals. In one household, one partner may be ill while the other is still fit, thus undermining much of the quality of life for both. Furthermore, retirement can hardly be described as a period of leisure for large numbers of women, and the transition from the world of work continues to be tough and premature for many people.

Life expectancy (both at birth and for people who are already old) is increasing throughout the world. In the developed world especially, and assuming no devastating new disaster, war, or epidemic, most children born today can expect to live to the biblical span of three score years and ten, while many, particularly women, will live well beyond it. Even among the very old, age-specific mortality rates seem to be falling in Britain, though with some significant bumps on the downward curve. This casts doubt on the theory that improvements in health mean that more and more people are ending their lives when they reach the 'natural' human span. Though early old age is increasingly a time of opportunity and activity for many more people than in previous generations, the lifespan does not seem to be as fixed as had been assumed: we are seeing a growing number of centenarians among us.⁶ In 1991 in the UK, 2317 women and 285 men were known to reach their 100th birthday (and received a congratulatory telegram from the Queen) compared with about 200 people a year in the early 1950s.

Although the third age has become longer and more commonplace, however, the reality of a frailer and more dependent fourth age remains. The argument focuses on whether this period is compressed or different in other ways from the periods of morbidity and disability experienced in later life in the past. Here the evidence is conflicting, partly because of the weaknesses of self-report studies among populations whose expectations are changing and partly because the exact forms and functional impact of the disabilities experienced are different. It seems that, for some people, the fourth age may have become compressed into a shorter final phase of life after a longer and healthier retirement period. In evidence, Fries⁷ cites particular declines in cardiovascular disease, including a 28% decline in myocardial infarction over 26 years. For others, though, greater life expectancy has merely extended the period of chronic sickness or disability, or has revealed to the 'survivors' in the late 20th century new layers or forms of illness which earlier death from a different cause might otherwise have left pleasantly undiscovered.

Probably the greatest such blight comes in the form of organic mental frailty, particularly dementias of Alzheimer's type or resulting from multiple minor strokes or arterial disease. This seems to affect between 4 and 10% of people aged 65 years, some of whom experience only minor memory loss or occasional confusion, rising to about 1 in 6 of people over 85. Here prevalence rates have increased with increasing very old populations but the data are confused by changing definitions

of the key conditions. Though no intervention has yet had a significant impact on identifiable organic states, estimates of age-specific prevalence have been reduced over the past 20 years. Non-organic mental frailty, either treatable or arising from real causes of anxiety or depression (for example, loss of partner, independence, valued roles in life), is more common and, like the mental symptoms of some treatable physical conditions, is too often confused—by the public and some professionals alike—with organic loss of intellectual ability.

The overall pattern of slightly declining morbidity in relation to certain conditions is also complicated by the emergence of new ones. The obvious one at present is AIDS, though it has not much affected already old populations in developed societies. Climatic changes and other environmental hazards are likely to have a more significant negative impact on morbidity patterns in later life through the incidence of skin and other cancers. Other problems, such as those that affect sight, hearing, mobility, eating, or circulation also increase with age but the opportunities for prevention are growing with greater knowledge (though some of the preventable diseases of an affluent society are still on the increase while others are becoming more effectively treatable). Improvements in household amenities, including heating systems, continue to improve the quality of life and health in old age but the prevalence of functional disability, of all levels of severity, clearly rises much more steeply after the age of 75.⁸ Better pensions for many people (which may prove hard for the declining working population to sustain in the future) have allowed some new opportunities and reduced some stresses. Fear of crime, however, is increasing and environmental design still rarely takes older or disabled people into account. Shifts away from public transport provision tend to isolate and disable many older people, particularly women who are the main survivors into later ages. The long term capacity of our society to afford growing income maintenance for the future elderly and to meet other aspects of the demographic challenge in the next half century remains unclear; to do so properly will require inter-generational understanding and creativity as well as economic growth and social stability. Without this, the period of socially generated disability in later life may begin to grow again.

In looking at these data, it is important to recognise two linked features. One is the *diversity* in culture, ethnicity, skills, expectations, personal histories, circumstances, and health *within* each age category. The other is that, though being very old puts a person at greater risk of frailty and illness (and therefore a cause for proper concern to families and to governments), most of the elderly, and even very old, at any one time are not seriously disabled or dependent. Clearly, the oldest members of our society have most need for special attention, and their care represents a challenge of great importance to all of us. But this is liable to taint public images of older people, most of whom are living fruitful and independent lives. Minor impairments may be quite commonplace (for example, failing eyesight, arthritis) and anxiety about the future may be real, but for many elderly, the problems they experience are socially and economically generated rather than being a function of age *per se*. For some, lack of opportunities for education, creative leisure, travel, family roles, and personally or socially valued activities derive from reduced financial circumstances. For others, they relate more to a lack of empathy from the community at large. Many opportunities do not exist simply because of 'generational prejudice'; potential providers have not discerned the viable and vibrant market for appropriately designed goods and services modelled and promoted with the priorities and the diversity of the older consumer in mind.

Nevertheless, unless we accept Fries' arguments about the compression of morbidity, demographic changes alone warrant some growth in total health and social care provision, especially

of long term care in both residential and domiciliary settings.^{9 10} This will probably need to be divided into preventive and curative services that extend and improve the third age on the one hand and supportive and palliative care for the fourth age, most intensively in the (delayed) last year or two of life, on the other. This is despite the reality that 'the elderly' already account for significant proportions of service use (and cost) for governments and for families.

The challenge is to find means of expanding provision cost effectively while also making what is available more sensitive and appropriate than ever before. This is one of the ostensible purposes of the emphasis in the National Health Service and Community Care Act being implemented in 1993 in Britain, on assessment (and re-assessment) and on the construction of individual and flexible packages of care to fit assessed need.

Central to our understanding both of what services are likely to be appropriate and of what factors affect differential patterns of ageing or coping with later life are *longitudinal studies*. These can indicate which groups are most likely to survive and experience which features of later life and in what numbers. Because this is an expensive form of research and since sub-samples of major studies are unlikely to be sufficient to shed light on some of these experiences and on alternative options and impacts, limited (that is short span) longitudinal studies across key transitions (for example retirement, bereavement, onset of illness, entering a new home, receiving care of various kinds) may be needed to provide essential insights to service planners and trainers of care staff. Fortunately, a few longitudinal studies originally established in the 1940s and 1950s to examine health and predictors of success in children are themselves ageing along with their

cohorts of respondents who have been interviewed and examined, together with their own parents and children, at intervals since then. It will be interesting and valuable if these studies of baby boomers moving through mid-life can become resources not only in identifying predictors of 'successful ageing' but also in mapping paths towards appropriate levels and types of health and social care and in defining the proper focus for future educators.¹¹

JONATHAN BARKER
BASIS Centre on Ageing,
Health and Management of Social Care,
University of Surrey,
Guildford, Surrey
GU2 5XH

- 1 Anonymous. *Vital world statistics*. London: The Economist 1990.
- 2 Office of Population Censuses and Surveys. *Population projections by UK Government Actuary, 1989-based*. London, HMSO: 1992 OPCS PP2 No 17
- 3 US General Accounting Office. *Long-term care: projected needs of the aging baby boom generation*. Washington, US General Accounting Office : 1991.
- 4 Fries JF. Ageing, natural death and the compression of morbidity. *N Eng J Med* 1980; **303.3**: 130.
- 5 Bury M. Arguments about ageing: long life and its consequences, In Wells N, Freer C. eds. *The ageing population: burden or challenge?* London, Macmillan: 1988.
- 6 Bury M. *Life after 90*. Routledge: 1991
- 7 Fries JF. The compression of morbidity: near or far? *Milbank Quarterly* 1989; **67**: 2.
- 8 Martin J, Meltzer H, Elliot D. *Surveys of disability, Report 1: the prevalence of disability among adults*. London: HMSO: 1989.
- 9 Laing WR, Hall M. *Agenda for health 1991: the challenges of ageing*, London, Association of British Pharmaceutical Industries: 1992.
- 10 Social Services Committee *Public expenditure on the social services*, London, HMSO: 1988.
- 11 Barker J. *Later life in Britain: the views from 1993*. Derby, Methodist Homes for the Aged and Tunbridge Wells, Third Age Research Publications: 1993.