Global theme issue—Ageing

In October 1997 many journals around the world will be focusing by agreement on Ageing as an issue for health research and publication (the week of 22 October for weekly journals). We are pleased to join in this global focus on probably the major source of need for care, management, and research in the next century.

We have had many papers submitted and because of the long time scales involved in publishing a bi-monthly journal, we will have several held over until our next number in December 1997. However, in this number we have papers from several countries covering epidemiology, health services research, and methods in relation to ageing, and a specially commissioned comment.

JECH and Society for Social Medicine combined meeting

We also publish the abstracts from the UK Society for Social Medicine meeting in September 1997, and I would like to draw readers' attention to the combined meeting to be held in Manchester on 30 October 1997, sponsored by the Journal and the Society for Social Medicine, "Epidemiology - Past and Future: A Celebration of 50 Years of the JECH". Speakers with international reputations will address the future of epidemiology with a look back at the past 50 years of the Journal.

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Editor

Comment

Public health implications of ageing

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We can all expect to live longer than our parents in most countries of the world as increasing life expectancy has become a global phenomenon. What surprises is the relative speed of recent gains: life expectancy in Britain increased by 2.5 years between 1971 and 1991, which is equal to the gains achieved between 1851 and 1961. However, improvements in life expectancy in central and eastern Europe have been lost since the break up of the former USSR. Declines in fertility have contributed most to population ageing over the past century, but falls in mortality even at older ages have also had important effects. In developing countries, there is no doubt that maternal and child health services have had a major impact in accelerating population ageing through the promotion of effective family planning. Unfortunately, population ageing is too frequently seen as a "problem" rather than as a legacy of successful social and economic development.

Causes of increased life expectancy

The question "Why are the Japanese living longer?" is not short of plausible answers: reductions in environmental and personal risk factors for common diseases, economic and social development, better health and social policy, investment in social capital, and interactions between these explanations are all possibilities. Untangling such complex variables, many of which are intrinsically hard to measure given the paucity of relevant data, is the tricky bit. Income disparities are clearly relevant, but are only partial predictors of life expectancy. The role of medical care in extending life expectancy remains an area of considerable controversy.

The different experiences of the countries of the former USSR and western European countries provide new opportunities to conduct better ecological trend analyses, in addition to cohort studies linking individual risk factors to subsequent survival in different populations. Topics that require study include quantity and quality of medical care, environmental pollution, socioeconomic factors, and health behaviours.

Compression of morbidity

While demographic projections have tended to provoke gloomy views of increased social and health care burdens, the concept of compression of morbidity—future cohorts will postpone morbidity and disability into a smaller portion of their lives—has been helpful in providing a more "up-beat" view of the future. Alternative hypotheses are of expansion of
morbidty* or of a steady state associated with reductions in severe disability and increases in milder disability, possibly due to medical interventions. Each of these hypotheses can claim supportive evidence, but no consistent trends have emerged, which is probably due to difficulties in measurement, changing criteria for disability, and paucity of data.

**Healthy expectancy**
The supposed purpose of health and social policy in older age is to extend not just the length of life but also its quality, so an understanding of the determinants of living free of disability (or health expectancy as it is generally termed) is essential. In Britain, in common with many countries, we lack the necessary data to study health expectancy properly and thereby test the hypotheses of compression, expansion, or steady-state of morbidity trends.

In the absence of complete data, innovative methods have been used to make comparisons and projections of disability-free life expectancy. Expert opinions of the disability associated with different diseases and routinely available mortality statistics have been used from 47 countries representing established market economies to the poorest sub-Saharan African countries. While the potential errors and many assumptions inherent in such an approach are obvious, the findings appear robust and challenge current priorities of health services and research funding agencies. Such work highlights the need for reliable routinely available international data on disability.

Information on disability provided by national surveys such as the national disability survey is useful if conducted at regular intervals. However, surveys cannot provide the transitional probabilities of becoming disabled and of recovering at different ages, nor do they allow assessment of whether these probabilities are increasing or reducing among successive cohorts of older people. Much more effort must be given to establishing large, nationally representative cohort-sequential studies of disability (which have an undeserved reputation for being costly) so that international and national comparisons of the impact of health and social policy may be monitored.

**Priorities**
Health expectancy information also helps define priorities. By including disability as well as mortality in the assessment of burdens of disease, different priorities emerge—for example road traffic accidents and depressive illness topple stroke and cancers from their prime positions in global league tables. The diseases that contribute most to health expectancy and least to life expectancy are the obvious targets for prevention, treatment, and amelioration if it is intended to compress morbidity. If these criteria are used, osteoarthritis and visual and hearing impairments also gain priority status.

**Reversible disability**
By the age of 80 years four out of five people have some self-reported disability, implying a considerable "iceberg" of unreported suffering. A model based on the concept of reversible disability offers a logical framework for public health action. Disability may be improved by focusing on the disease itself (eg prevention, treatment, palliation), the individual (eg education, welfare benefits, social support), and the environment (eg public transport, shops, entertainment, interior design). Public health medicine, health and social services, local government authorities, and other sectors may achieve better health of ageing populations through concerted, rather than fragmented, actions.

We have little information on the contributions to disability of disease, the environment, and the individual and even less idea of the relative effects of intervening in each area. For example, would frail elderly people be healthier and happier if resources spent on geriatric day hospitals were provided as cash payments to patients? Does an effective occupational therapy service* increase its health gains by additional medical input and greater use of prosthetic environments? A wider vision than the current NHS Health Technology Assessment programme is required if such important questions are to be tackled.

**Effective health services**
It might be assumed that increased longevity would result in greater demands being placed on health services, particularly hospital inpatient admission. Comparisons made between younger and older people's use of hospitals in the last year of life showed that the very old (85+ years) were less likely to have been admitted to hospital than those aged 65-84 years. Furthermore, between 1976 and 1985 the mean total time spent in hospital in the year before death showed no appreciable change despite an increase in life expectancy of about a year during this period.

Tremendous progress has been made in health services evaluation of interventions of value to older people (eg stroke rehabilitation, comprehensive geriatric assessment*) and this evidence is now available to support wider commissioning and use of such services. There is no longer any debate on the need for geriatric medicine, but rather on the amount required.

On the negative side, efforts to promote health among older people through life style risk factor reduction (eg healthy diet, exercise, stopping smoking) appear to be of very limited benefit and should be abandoned in workforce and primary care populations. Resources currently expended on such activities would be much better directed towards people who already suffer from cardiovascular diseases who have much to gain.

**Social and economic consequences**
The continued support of family and friends as unpaid carers is of crucial importance to many elderly people. It has been estimated that as many as 6 million people in Britain act as carers; and without their contributions it is unlikely that any health service would function.
Finding the best means of supporting these carers is an urgent priority—and it is encouraging that the Association of South East Asian Nations (ASEAN) is currently commissioning research to compare family support policy and practice in member countries of a region where populations are ageing most rapidly.

The most vital social intervention for all elderly people is the provision of universal and adequate pensions. Simplistic notions of an expanded private sector insurance industry both supporting pensioners and generating wealth as an alternative to collective social responsibility require critical appraisal, counter arguments, and practical experience. While there will always be concern about tax burdens required to provide pensions and social and health care, politicians are often unaware that the majority of the population expect, and are willing, to support their parents and grandparents. Rather than promoting inter-generational conflict we need policies which will support mutual respect and understanding.

The future
A new era in British politics has produced new ideas in the Department of Health—a minister for public health—tangible recognition of the social, economic, and environmental determinants of health of the population. It is to be hoped that the minister does not ignore either the needs or the contributions of the elderly population in moving towards a healthier and more equal society.

10 Manton KG. Changing concepts of morbidity and mortality in the elderly population. Milbank Q/Health Society 1982;60:183-244.