

Research paper

The ageing population: challenges for policy and practice

Kay Caldwell BA(Hons) PGCEA PhD RN RNT
Head of Institute of Nursing and Midwifery

Mohammed Saib BSc (Hons) MSc MRes RN RMN
Senior Lecturer

Kate Coleman MSc
Research Assistant

Middlesex University, School of Health and Social Sciences, London, UK

What is known on this subject

- The rate, impact and causes of population ageing varies across the world.
- Differences in population ageing relating to gender and ethnicity are evident in the UK.
- Population ageing has a major impact on the provision of publicly funded health and social care.

What this paper adds

- The positive impact of population ageing is poorly recognised.
- Older people are the majority users of healthcare services, yet these services are not structured to best meet their needs.
- There is a need to engage with older people in order to de-marginalise their input to service delivery.

ABSTRACT

The concept of the ageing population is one that has generated much debate and discussion at global, national and local levels. While on the one hand an ageing population is viewed in a positive light as an indicator of the improving availability of effective healthcare, on the other hand it is viewed as problematic in relation to both health and welfare policy and the provision of services. The demography of ageing provides the context for national and international comparisons. This paper examines the global and national perspectives on ageing and

explores the assumptions that underpin the different views on population ageing. The policy and practice challenges that are presented to the UK by an ageing population are explored. The impact on health and major differentials in ageing – sex and ethnicity – are outlined and considered in relation to health and welfare policy and practice. The ways in which these challenges can be addressed are discussed, and recommendations for practice are outlined.

Keywords: ageing, demography, population

The global perspective: a global issue with local variations

The issue of population ageing is one that has come to be seen as having a major impact on the provision of publicly funded health and social services. The economic and social costs of an ageing population have been

a major driver in the reform of health and welfare services, although there is some dissent about the degree to which population ageing should be viewed as problematic (Gee, 2002). Alternatively, increasing

longevity can be viewed as a positive indicator of effective health and welfare policy: people are living longer because prevention and treatment of the major causes of premature death are available.

Walker (2002) points out the similarities and differences across the European Union (EU): while the reasons for the ageing of the population are very similar across member states, the rates differ significantly. In several EU regions population growth had levelled off or in some cases declined before the end of the last century, and this is expected to extend to the majority of EU regions within the next 10 years. Although population ageing was for some time considered a by-product of economic development, it is now recognised as a global issue that affects countries at different stages of that development. Different patterns of ageing are influenced by changing trends in fertility, immigration and migration, as well as by increased longevity. The US is an ageing society, but the proportion of older people in the US is smaller than in many EU regions (Wiener and Tilly, 2002). If the current pattern of higher fertility rates and immigration continues, this is likely to remain the case (Eberstadt, 2001). By contrast, in China increased longevity and relatively lower levels of fertility result in a more rapid ageing of the population (Woo *et al*, 2002) that may even outstrip many EU regions (Eberstadt, 2001) by the middle of this century.

The demography of ageing in the UK

In the UK in 2004, there were marginally over 9.5 million people aged 65 years, and over one million aged over 85 years. Out of a population of almost 60 million, these groups comprise 16% and almost 2% of the total population respectively (Office for National Statistics, 2006a).

In common with many other countries, the UK is an ageing society. While the overall population is projected to increase by 10% over the next 30 years, the population of those aged 65 years and over is projected to increase by 60%, and the numbers of those aged 85 years and over to more than double (Office for National Statistics, 2005a). Furthermore, over the last 50 years there has been a substantial change in the age composition of older people. In 1951 those aged 50–59 years represented 43% and those aged 85 years and over comprised less than 2% of the total population aged 50 years and over. By comparison in 2003 the two groups represented 38% and 6%, respectively, of the older population. Projections indicate that by 2031 these proportions will be 29% and 8%, respectively (Office for National Statistics, 2005b).

In the UK, population ageing is primarily the result of sustained low fertility, with declines in mortality rates being an important contributing factor. In particular, falls in the death rates at older ages have contributed towards making the oldest old the fastest growing age group in the UK population.

Defining old age

Although there is no universally agreed definition of 'old age', for the purposes of service development in the UK older people are usually separated into three main groups:

- *young elders*: individuals in this group are aged between 55 and 64 years and are generally well and active. The goal of healthcare services for this population is to extend the years of disease-free and active life where possible
- the *transitional group* comprises people aged between 65 and 85 years. People in this group are in transition between healthy active life and frailty. For these people, the goal of healthcare services is to identify emerging problems, prevent disease and reduce long-term dependency
- *frail older people* fall into the third and final group. These people are aged 85 years and over and exhibit significantly higher levels of pathology, chronic disease and disability than people in the other two groups. The goal of healthcare services is to recognise the complex interactions of physical, mental and social issues the people in this group experience, and provide appropriate services in response.

However, these are demographic conventions and do not mean that each category should be considered a homogenous group: although the individuals in a single category will exhibit the same chronological characteristics of ageing, they may well exhibit different rates of physical, psychological and social ageing. For any individual, these may impact on appropriate service provision more than chronological characteristics alone. Furthermore, these conventions may be subject to change as the population ages. For example, the oldest old may come to be defined as aged 90 years and over.

Sex differentials in ageing

In the UK older women outnumber older men. In 2004 there were almost five and a half million women aged 65 years and over compared with just over four million men. As percentages of the overall female and male populations, these figures represent 18% and

14%, respectively. The greater number of women than men is most pronounced among the very old: in 2004 there were just over three-quarters of a million women and a just under one-third of a million men aged 85 years and over. As percentages of the overall female and male populations, these figures represent 2.5% and 1%, respectively. The reason for this is greater female longevity. The death of men in both World Wars is also a contributing factor. However, life expectancy for men is increasing at a greater pace than it is for women, and this trend is projected to continue into the future. This has led to a narrowing of the gap between men and women, and this gap is expected to continue to narrow in line with the improvement in death rates among older men. In 2003 there were 85 men in the UK aged 50 years and over for every 100 women in the same age group. For the group aged 85 years and over, the ratio in 2003 was 40 men per 100 women. Projections indicate that in 2031 the ratios will be 90 men per 100 women for the group aged 50 years and over and 65 men per 100 women for the group aged 85 years and over (Office for National Statistics, 2005b).

These imbalances in the sex ratio, coupled with the tendency of women to marry men older than themselves, result in a marked difference in the marital status of the oldest old. Widowhood is common among women at older ages. In 2004, over 2.2 million women aged 65 years and over had been widowed. This compares with almost 600 thousand men in the same age group (Office for National Statistics, 2006a). Almost 80% of those aged 85 years and over are widows (Office for National Statistics, 2005b). A result of this is that women are more likely to live alone, and the proportion so doing increases with advancing age. Among women aged 75 years and over and who live in private households in Great Britain, 60% live alone. This compares with 30% of men in the same age group (Office for National Statistics, 2005b).

These marital status variations are important in explaining the differences in living arrangements for older men and women and whether older people are able to continue living in their own homes. Other important factors include precarious health status, family structure and support networks, financial status, availability of social services, and cultural attitudes.

Ethnic differentials in ageing

Overall, the demographic profile for non-white minority ethnic groups in the UK is young: approximately one-third is aged 16 years and under, compared to around 20% of the white British population (Office for National Statistics, 2001). While 17% of the white population is aged 65 years and over, this proportion

stands at a little over 5% for non-white groups. Demographic profiles vary across minority ethnic groups. For example, the black Caribbean population has the oldest profile, with just over 10% aged 65 years and older, while the Pakistani and Bangladeshi populations have the youngest profiles (Nazroo *et al.*, 2004). Progressive ageing in non-white groups is anticipated in the future, although this will depend on fertility levels, mortality rates and future net migration (Moriarty and Butt, 2004). At present, the great majority of older non-white minority ethnic people in the UK are first-generation migrants. As these populations age, the trend with regard to declining fertility may not reflect that of the indigenous population and therefore it is not inevitable that the population of minority ethnic groups will age, while the actual numbers increase. However, the proportion of minority ethnic older people who were born in this country will increase should the current immigration pattern remain stable.

Differences in mortality rates mean that women aged 65 years and over normally outnumber men. However, for some ethnic groups this usual pattern had been affected by immigration patterns. This is particularly marked in the Bangladeshi population where women comprise only one-third of those aged 65 years and over (Office for National Statistics, 2001).

The impact of culture

Health problems are not only diseases to be described in terms of pathology, they are also illnesses to be described in terms of the social and psychological responses to the underlying disease (Dein, 2006). An individual's experiences of illness cannot be considered in isolation from the cultural context in which it occurs. This is particularly true in the case of life-threatening or life-limiting illnesses, or towards the end of life, where issues of meaning and significance may assume increased importance for patients (Pargament, 1997; Dein, 2006). Cultural factors are involved at every stage of illness from prevention and screening through to palliative care and end-of-life issues.

A patient's beliefs concerning the origin and meaning of illness, appropriate and inappropriate treatment, normative patient-clinician interactions and expectations of recovery all impact upon the presentation of symptoms, communication, decision making and compliance with treatment (Helman, 2001). Furthermore, cultures may vary widely in the status they give to the elderly. While in industrial societies, loss of productivity with age and retirement is usually associated with a steep drop in social status, in traditional societies the respect accorded to the aged is usually much higher (Helman, 2001). These traditional attitudes may persist in minority ethnic immigrant communities in the

UK. Age-related cognitive decline may also be perceived differently, with some cultures viewing it as less of a 'problem' than others (Ghosh and Khan, 2005).

Life expectancy and healthy life expectancy

Between 2003 and 2005, the life expectancy at birth in the UK was 76.3 years for males and 80.7 years for females (Office for National Statistics, 2006a). While life expectancy provides an estimate of average life span, healthy life expectancy provides an estimate of the average number of years lived free from health-related problems. Similarly, disability-free life expectancy is an estimate of the years of life free from limiting long-standing illness or disability. These measures are distinct, and gains in life expectancy may not be matched by similar gains in healthy life expectancy (Office for National Statistics, 2005a). Over the last two decades, the gains in life expectancy for men do not equate to gains in healthy life expectancy: just over half of the added years of life expectancy are estimated to be healthy years. In 2002, men aged 65 years could expect to have 12 years of healthy life ahead of them, with just over nine of these years also being free of significant disability. This represents a decrease of 2% in the proportion of life spent either in good health or without disability during the period 1981–2002.

The changes over the same time period for women have been markedly different. Over 80% of the gain in life expectancy is estimated to be spent in good health and just over 60% of the gain will be spent free from disability. In 2002, women aged 65 years could expect to have 14 years of healthy life ahead of them, with slightly less than 10.5 years also being free of significant disability. This represents an increase of 3.5% in the proportion of life spent either in good health or without disability during the 20-year period to 2002.

Despite this, women are more likely than men to spend more years in poor health; in 2001, the expected number of years lived in poor health for those aged 65 years and over was just under four and a half for men and almost six for women. Similarly, women report higher levels of disability than do men at any given age (Office for National Statistics, 2005b).

Marital status is an important determinant of health behaviour for men (Davidson and Arber, 2004). Older men who live without a female partner are more likely to lack the health-protective support experienced by partnered men. Hence, they are less likely to have a caretaker to monitor their health behaviour, or a gatekeeper to encourage health consultation. Lone men are more likely to report poor health than partnered men, and divorced men consistently report both the

poorest health and the greatest prevalence of health risk behaviours including alcohol and tobacco consumption. By 2021 it is predicted that the proportion of divorced men over the age of 65 years will rise from the current level of 5% to 13%. Older lone men are more likely to live in residential care, despite having lower than average levels of disability than lone older women.

The health burden of old age

The overall incidence of ill health rises with age. Diseases that are common in older people in the UK include diabetes, chronic heart failure, cancers, stroke, dementia and mental health problems. Older people are most commonly affected by multiple medical problems, the cumulative effect of which may be greater than for any individual disease. A result of this multiplicity of disease is a higher than average incidence of polypharmacy. This is significant because older people are at an increased risk of adverse drug reaction. The proportion of older people with long-term disabilities that restrict activities of daily living also increases with age. In 2001, over 25% of those aged between 50 and 64 years in Great Britain reported such a disability. In the age group aged 85 years and over, the proportion rose to over 65% for men and 75% for women. Problems of acute illness may superimpose themselves on top of existing physical or mental impairment, economic hardship and social isolation. Comparatively minor problems may have a seemingly disproportionate psychological impact (Irvine, 1990).

Ethnic differentials in the incidence/prevalence of ill health

The incidence and prevalence of illness may vary according to ethnic group, with some minority ethnic groups showing higher rates of some diseases than the general population. For example, all South Asian groups show higher rates than the general population for most cardiovascular diseases, with Pakistanis and Bangladeshis showing the highest rates of all minority groups (Erens *et al*, 1999). The rate of diabetes in the Pakistani and Bangladeshi populations is over five times greater than that in the general population (Erens *et al*, 1999). Stroke mortality rates among black Caribbean communities are around twice the average rates in England and Wales (Erens *et al*, 1999).

Conversely, some minority ethnic populations may show lower rates of some other diseases than the general population. For example, black Caribbean

women demonstrate a significantly lower prevalence of angina and heart attack, while the Chinese population generally experiences lower rates of limiting, long-standing illness than the general population (Erens *et al*, 1999).

The difference between men and women in rates of disability and long-term illness that restrict activities of daily living also varies by ethnic group. In white populations, men report higher rates. However, in many minority ethnic populations, including Indian, Pakistani, Bangladeshi, black Caribbean and black African groups, this pattern is reversed, with women reporting higher rates of disability and long-term illness than men (Moriarty and Butt, 2004).

'Multiple hazard': the cumulative impact of sex and ethnicity on health

Older ethnic minority people face 'multiple hazard' as a consequence of their older age and their minority ethnic status (Nazroo *et al*, 2004). Poverty is a key determinant of both health status and service use in older people (Department of Health, 2000). Older people from some minority ethnic groups, such as those from the Bangladeshi and Pakistani communities, are at much greater risk of poverty than their white English counterparts. This is partly a reflection of the economic disadvantages experienced during their working lives, including lower-paid jobs and periods of unemployment. This disadvantage is unequally spread across minority ethnic groups, with the Bangladeshi and Pakistani groups the worst off, although all minority ethnic groups demonstrate some degree of disadvantage when compared with the white community (Department of Work and Pensions, 2004).

Health service use

The use of healthcare services rises with age, with individuals in the older age groups being the main users of both health and social care services in the UK (Department of Health, 2001). For example, in the year 1998/1999, approximately 40% of the NHS budget was spent on people aged 65 years and over. During the same period, patients in this age group occupied 65% of general and acute hospital beds (Department of Health, 2001). The highest NHS general practitioner (GP) consultation rates in the 12-month period ending 2004 were for men aged 75 years and over and women aged between 65 and 74 years. Both groups received an average of seven visits per person.

This compares with an overall average of four visits per person. During the same period, 7% of people in the UK reported an inpatient hospital stay. Of those aged 75 years and over, the percentage reporting an inpatient hospital stay was double the national average. The most common reason reported for inpatient admission in older age groups was circulatory and respiratory disease. This pattern of healthcare utilisation applies to both day case admissions and outpatient admissions (Office for National Statistics, 2006b).

The reasons for this pattern of healthcare service utilisation include the higher prevalence of ill health in people from older age groups, and the 'compression of mortality'. In the UK, death is an event that is progressively concentrated at advanced ages. Since healthcare costs are highest in the few months before death, this concentration of deaths in the oldest age group raises the proportion of healthcare resources devoted to the oldest old (Office for National Statistics, 2005a).

Importantly, older people are not only recipients of care. They are also major providers of informal care. In 2001, almost 15% of men and 10% of women aged between 65 and 84 years were providing unpaid care to family members or neighbours. Of those aged 85 years and over, almost 10% of men and 3% of women were acting as informal carers. Although the proportion of older people providing care declines with age, the proportion of time devoted to caring increases with age. Therefore, for the age group aged 85 years and over, 50% of those providing care were doing so for more than 50 hours per week. This compares to 38% of those aged between 65 and 84 years, and 17% of those in the 16–64 year age group (Office for National Statistics, 2005b). The toll of caring on both physical and mental health is well documented, with informal carers exhibiting increased ill health, psychiatric morbidity and stress in comparison to non-carers (Department of Health, Social Services and Public Safety, 2001).

Research also indicates that patients from minority ethnic groups may not be being offered an adequate range of healthcare choices. Many patients believe they are not given enough time, taken seriously enough, or examined properly during consultations (Firth, 2001). While under-referral may be the product of overtly racist attitudes, it is far more likely that under-referral and under-utilisation are the result of a combination of barriers to healthcare provision, beliefs and attitudes. On the part of clinicians, these may include language and communication difficulties, and assumptions that individuals from ethnic minority groups prefer to 'care for their own' (Social Services Inspectorate/Department of Health, 1998). On the part of patients, poor knowledge about available services and lack of confidence in staff ability to understand and meet religious and cultural needs may influence requests for referral and service use.

Service provision for older people

Older people are the main users of a range of healthcare services, and evidence from across the EU suggests that this has an impact on both cost and efficiency, including speed and efficiency of emergency care (George *et al*, 2006), and drug expenditure (Kildemoes *et al*, 2006). However, this level of use is often not matched with a focus on the needs of older people. Service users report poor, unresponsive, insensitive and discriminatory services, with one report finding that there was evidence of ageism across all services, taking a variety of forms including patronising and thoughtless treatment, and in some cases the failure to take seriously the needs and aspirations of older people (Audit Commission *et al*, 2006). Age Concern (2006, p.42) suggests that:

The current organisation of general hospital care does not meet the needs of many older people who may have a number of conditions ... There are often very limited opportunities for rehabilitation.

In the same paper, Age Concern (2006, p.40) claims that both:

... direct and indirect age discrimination remain at the heart of mental health services.

In the light of reports and commentary such as this, the current policy drive in the UK is to improve both generic and specialist services for older people. Important focal points of these improvements are the provision of patient-centred services and the user experience of healthcare services. Recent policy documents have been drafted in consultation with service users, as well as carers and healthcare professionals.

A recent initiative is the Partnerships for Older People Projects led by the Department of Health Older People and Disability Division. These pilot projects, that will be established during the period 2006–2008, aim to evaluate new models of service aimed at shifting the balance of services away from high-level needs (Department of Health, 2006). The move away from reactive services is envisaged both vertically from acute to primary care services and horizontally across health and social care agency boundaries. The models of service redesign are encapsulated within the following themes: timely or early interventions, low-level support, service user empowerment and involvement, cultural change, and joint commissioning (Department of Health, 2006).

This initiative is set against the background of the *National Service Framework for Older People* (Department of Health, 2001). National Service Frameworks

(NSFs) are established to improve services through setting national standards to drive up service quality and tackle existing variations in care. The *NSF for Older People* is a 10-year programme of action linking services to support independence and promote good health, specialised services for key conditions, and culture change. Key themes reflected in the NSF are respect for the individual, enhanced intermediate services to prevent unnecessary hospital admission, evidence-based specialist care and, in recognition of the fact that disability and ill health are not inevitable consequences of ageing, promotion of an active and healthy life. Older people are the predominant service users in most hospitals, and skills in their care should form part of the core competencies for all staff. This NSF recommends workforce development at all levels to build and strengthen the knowledge base and to foster more positive attitudes towards ageing and older people. Another key initiative is the single assessment process that is proposed across health and social care services. This is designed to reduce fragmentation of information systems and the unnecessary duplication of assessment procedures. A more streamlined and efficient assessment process will better enable timely interventions that in turn will both improve outcomes for older people and reduce the longer-term costs of care by reducing the need for support by families, hospital bed use and the need for intensive long-term care services.

Practical challenges in providing culturally sensitive healthcare in old age

The successful provision of healthcare to older people from minority ethnic groups may pose a practical challenge. These challenges include enabling patients to continue to observe the ritual requirements of their religious beliefs, for example by providing religiously acceptable food. Language difficulties are frequently cited by both patients and clinicians as a barrier (Firth, 2001). Although family members may be pressed into service as translators and interpreters, largely for reasons of convenience, this practice compromises the confidentiality that all patients are entitled to and may impede open communication. Enquiring about past medical history may prove problematic with many elderly patients, particularly recent immigrants, who may have little information concerning their previous health records in their country of origin (Ghosh and Khan, 2005).

Death and dying: the provision of palliative care

Most deaths occur in older age, but palliative care services in the UK disproportionately devote resources to younger patients, to the detriment of older people (Seymour *et al*, 2001). The Regional Study of the Care of the Dying found that age was an important influence in determining which patients receive hospice inpatient care (Addington-Hall *et al*, 1998a). Hence, patients with a cancer diagnosis who were admitted to hospice were younger than those who were not.

Another reason for the low levels of palliative care provision that older people receive is the traditional bias in favour of cancer diagnoses. In the year 2004–2005 around 90% of all palliative care patients had a diagnosis of cancer, compared with 10% of those diagnosed with non-malignancies (National Council for Palliative Care, 2006). However, research indicates considerable need for the provision of palliative care for patients with non-malignant disease, with frequency and severity of symptoms approaching those experienced by cancer patients (Addington-Hall, 1998; Addington-Hall *et al*, 1998b).

Discussion

The perception of the older population as a ‘problem’ group in society tends to be accepted without question. A variety of sources can readily be quoted to support this view. In particular, some of the more dramatic predictions of a decade or two ago which more or less implied that most western societies were about to be overwhelmed by a rising tide of older people have been tempered by reality (Smith and Tillipman, 1999). Although the UK population is not set to be ‘flooded’ with older people, the proportions of elderly are predicted to increase (Office for National Statistics, 2005a, 2005b). Concerns remain that politicians and planners have not reacted adequately to these projected increases, particularly the increase in the population aged over 85 years.

Older people are the biggest users of health and social care services. They are the ‘core business’ of the NHS, and it could be argued that getting it right for older people means getting it right for everyone. The diverse demographic, social and economic characteristics of older people make this population a very heterogeneous one. Older people’s health problems are different and difficult and require special expertise. Multiple pathologies, atypical presentation and a combination of mental health and physical illness are often encountered. Additionally, older people take a longer time to recover from episodes of acute illnesses,

often developing confusion and mobility problems as well as urinary and/or faecal incontinence (Morris, 2003). The Audit Commission’s report *Integrated Services for Older People* stated that ‘older people want services to be flexible, co-ordinated and focused on helping them to remain independent for as long as possible’ (Audit Commission, 2002, p. 3). The report went on to comment that older people too often are offered a confused, disjointed response when they need help or advice. It recommends that services are organised around the user, such that all stakeholders should recognise their interdependence by having a shared vision that is based on the view of older people.

For effective services to be delivered to older people there is a need to move away from the consideration of older people as a problem, and towards consideration of them as a resource in terms of caring both for themselves and for others. Empowering older people in this way requires health and social care professionals to engage with older people as their main rather than as a marginalised group of service users, and to ensure services are organised around rather than across their needs. This engagement needs to include not only decision making at the point of service delivery, but also involvement in service delivery, service planning and the education of health and social care professionals.

REFERENCES

- Addington-Hall J (1998) Palliative care in non-malignant disease. *Palliative Care Today* 7:10–11.
- Addington-Hall J, Altmann D and McCarthy M (1998a) Variations by age in symptoms of dependency levels experienced by people in the last year of life as reported by surviving family, friends and officials. *Age and Ageing* 27:129–36.
- Addington-Hall J, Fakhoury N and McCarthy M (1998b) Specialist palliative care in non-malignant disease. *Palliative Medicine* 12:417–27.
- Age Concern (2006) *Age Concern Policy Position Papers: health and health care*. London: Age Concern.
- Audit Commission (2002) *Integrated Services for Older People*. London: Audit Commission.
- Audit Commission, Commission for Social Care Inspection, Health Care Commission (2006) *Living Well in Later Life*. London: Audit Commission, Commission for Social Care Inspection, Health Care Commission.
- Davidson K and Arber S (2004) Older men: their health behaviours and partnership status. In: Walker, A and Hagan Hennessy C (eds) *Growing Older: quality of life in old age*. Maidenhead: Open University Press, pp. 35–59.
- Dein S (2006) *Culture and Cancer Care: anthropological insights in oncology*. Buckingham: Open University Press.
- Department of Health (2000) *Fuel, Poverty and Health*. London: Department of Health.
- Department of Health (2001) *National Service Framework for Older People*. London: Department of Health.

- Department of Health (2006) *Partnerships for Older People Projects: making the shift to prevention*. London: Department of Health.
- Department of Health, Social Services and Public Safety (2001) *Informal Carers Report*. Belfast: Department of Health, Social Services and Public Safety.
- Department of Work and Pensions (2004) *Households Below Average Income*. London: Department of Work and Pensions.
- Eberstadt N (2001) World population prospects: the shape of things to come. *AEI online* April 1. www.aei.org/publications/pubID.12666,.all/pub_detail.asp (accessed 23 October 2007).
- Erens B, Primatesta P and Prior G (1999) *Health of Ethnic Minorities, Volume 1: Findings*. London: The Stationery Office.
- Firth S (2001) *Wider Horizons: care of the dying in a multicultural society*. London: National Council for Palliative Care.
- Gee M (2002) Misconceptions and misapprehensions about population ageing. *International Journal of Epidemiology* 31:750–3.
- George G, Jel C and Todd B (2006) Effect of population ageing on emergency department speed and efficiency: a historical perspective from a district general hospital in the UK. *Emergency Medicine Journal* 23:379–83.
- Ghosh P and Khan SA (2005) *Transcultural Geriatrics: caring for elderly people of Indo-Asian origin*. Oxford: Radcliffe Publishing.
- Helman CG (2001) *Culture, Health and Illness* (4e). London: Arnold.
- Irvine R (1990) Sickness and health in old age. In: Caird F and Brewin T (eds) *Cancer in the Elderly*. London: Wright.
- Kildemoes H, Christiansen T, Gyrd-Hansen D, Kristiansen I and Andersen M (2006) The impact of population ageing on future Danish drug expenditure. *Health Policy* 75:298–311.
- Moriarty J and Butt J (2004) Social support and ethnicity in old age. In: Walker A and Hagan Hennessey C (eds) *Growing Older: quality of life in old age*. Maidenhead: Open University Press, pp. 167–87.
- Morris J (2003) Medical and social care of highly dependent older people. *The AVMA Medical and Legal Journal* 9:25–8.
- National Council for Palliative Care (2006) *National Survey of Patient Activity Data for Specialist Palliative Care Services – MDS Full Report for the Year 2005–06*. London: National Council for Palliative Care.
- Nazroo J, Bajekal M, Blane D and Grewal I (2004) Ethnic inequalities. In: Walker A and Hagan Hennessey C (eds) *Growing Older: quality of life in old age*. Maidenhead: Open University Press, pp. 35–59.
- Office for National Statistics (2001) *Census 2001*. London: Office for National Statistics.
- Office for National Statistics (2005a) *The Demographic Characteristics of the Oldest Old in the United Kingdom*. Population Trends No. 120. London: Office for National Statistics.
- Office for National Statistics (2005b) *National Statistics Online: focus on older people*. www.statistics.gov.uk/focuson/default.asp#olderpeople (accessed 23 October 2007).
- Office for National Statistics (2006a) *Health Statistics Quarterly*. London: Office for National Statistics.
- Office of National Statistics (2006b) *Focus on Health: use of services*. London: Office for National Statistics.
- Pargament KI (1997) *The Psychology of Religion and Coping: theory, research, practice*. London: Guilford Press.
- Seymour J, Clark D and Philip I (2001) Palliative care and geriatric medicine: shared concerns, shared challenges. *Palliative Medicine* 15:269–70.
- Social Services Inspectorate/Department of Health (1998) *They Look After Their Own Don't They? Inspection of community care services for black and ethnic minority older people*. London: Social Services Inspectorate/Department of Health.
- Walker A (2002) Ageing in Europe; policies in harmony or discord? *International Journal of Epidemiology* 31(4):758–61.
- Wiener J and Tilly J (2002) Population ageing in the United States of America: implications for public programmes. *International Journal of Epidemiology* 31:776–81.
- Woo J, Kwok T, Sze F and Yuan H (2002) Ageing in China: health and social consequences and responses. *International Journal of Epidemiology* 31:772–5.

CONFLICTS OF INTEREST

None.

ADDRESS FOR CORRESPONDENCE

Dr Kay Caldwell, Head of Institute of Nursing and Midwifery, Middlesex University School of Health and Social Sciences, The Archway Campus, Highgate Hill, London N19 5LW, UK. Tel: +44 (0)20 8411 6458; fax: +44 (0)20 6411 4669; email: k.Caldwell@mdx.ac.uk

Received 21 May 2007

Accepted 14 September 2007