

Longevity, from a Maltese Family Doctor's Perspective

Dr Jean K SOLER and Mrs Paula WALLS

This article is largely derived from an assignment submitted in March 2005 by the first author as part of a Masters in Primary Care and General Practice near the University of Ulster in Northern Ireland. The essay was written for the purposes of summative assessment of the module on "Primary Care Concepts and Principles" led by Mrs. Paula Walls. The assignment question was: "Consider how increased longevity has affected disease patterns and what effect this is likely to have on your practice in the next decade. Compare and contrast your thoughts with your fellow students. Can you identify any patterns?"

Introduction

People around the world are living longer at a time when, in contrast, birth rates tend to fall. Worldwide there are some 600 million aged 60 and over, this number being expected to double by 2025 (WHO, 2004). The implications of this phenomenon are well recognised by the World Health Organisation (2004) which cites the improvements in health resulting in increased longevity, and increasing health care needs coupled with population and demographic change as a health care priority. This article will consider the impact of longevity and assess its impact for the family doctor in Malta.

Background

Loudon et al (1998), reflecting on past changes in UK general practice, reproduce a table of disease patterns from 1950 to the mid 1990's. They point out that some disorders have become commoner due to increasing longevity, such as osteoarthritis, Alzheimer's disease, some cancers, heart disease and Parkinson's disease. It seems evident that the number of co-morbid diseases also increases sharply with age (van den Akker, 1999, Wilson et al, 1962, Metsemakers et al, 1993). Population ageing will thus lead to increasing multiple morbidities and multiple treatments.

It is anticipated that the burden of disability and social problems will increase exponentially as populations age. Social problems may be compounded by a shift in the balance between productive workers and dependent pensioners, additionally challenging equity in health care delivery as the rapidity of population ageing outpaces social and economic development in developing countries.

Developing countries will become old before they become rich while industrialized countries became rich while they were growing old. (World Health Organisation, 2004)

The implications of longevity for family medicine in Malta

The Maltese situation appears to mirror international trends with increases in chronic diseases, multi-morbidity, disabilities and social problems. Diseases that are more prevalent locally in older age groups, such as diabetes mellitus type II and dementia, would also be expected to increase in prevalence (WHO, 2004).

Local morbidity data could be useful to explore the phenomenon. Since 2000 the author has been collecting data from the electronic patient records of Maltese Family Doctors who use the International Classification of Primary Care (Hofmans-Okkes and Lamberts, 1996) to code all elements of their contacts with patients, including diagnoses and interventions (Soler and Okkes, 2004). On comparing morbidity between age groups, one can see that the distributions of diagnostic titles are markedly different. In the elderly (Table 1), the general (A), cardiovascular (K), respiratory (R) and musculoskeletal (L) conditions predominate, whilst in the overall distribution (Table 2) the respiratory diagnoses dominate, followed by general and then digestive (D) diagnostic titles. If these trends are representative, one can predict a significant shift in local morbidity patterns away from acute (and often infective) generalised, gastrointestinal or respiratory illness, towards more chronic and degenerative disease (data on file not tabulated) as the population ages (Soler, 2005).

Malta's population is still relatively young by European standards, but is expected to age significantly in the short term. Graph 1 shows the population distribution in 2003 compared with 20 years previously. Growth is expected to continue, and whilst in 2004 the age group 65+ counted 21,700 male and 30,300 female members, in 2015 these numbers are expected to increase by over 30% to 28,400 and 39,800 respectively (Demographic Review 2003, 2004, p ix, 15).

Local national policies are based on the World Health Organisation European region "Health for all" policy document "Health 21", which can then be taken as an appropriate local and international standard. Its target 5 "Healthy ageing" recommends that:

"by the year 2020, people over 65 years of age should have the opportunity of enjoying their full health potential, and playing an active social role." (World Health Organisation, 1999)

The document (Box 1) recommends specific actions and defines measurable outcomes regarding achievement of this target. The focus is on optimising functional status and retaining inherent capacities through facilitative national policies and development of accessible needs-based services within communities. Health promotion and preservation are central elements of this drive (World Health Organisation, 1999).

Meeting the needs of an ageing population with respect to the "Health21" document therefore pressures the primary health care (PHC) provider to act as patient advocate to pressure government, local councils, community groups and social services, directly and through professional associations, to initiate the recommended changes (WHO, 1999). PHC providers should also act at the individual patient level, actively promoting healthy lifestyles and performing interventions to prevent disease and preserve health. Practices should introduce evidence based screening programmes, piloted needs-assessment instruments and pro-active prevention and management strategies for chronic diseases (Strauss et al, 2005).

Critics of PHC may argue in favour of secondary or tertiary models of care to address the problem with advanced technologies or disease-centred strategies. However, increasing multi-morbidity is best addressed in PHC (WHO, 1999). Patient management in primary care, oriented towards patients' overall health care needs, emerges as a more promising strategy than care oriented to individual diseases (Starfield et al, 2003). PHC should be lobbying for increased resources using international and local research evidence.

"...older people encounter many barriers to care." (World Health Organisation, 2004)

PHC has a responsibility to offer affordable and accessible care, being sensitive in pricing strategies and actively identifying and removing barriers (Dowling and Glendinning, 2003). Practical examples include the local practice of same day home visits and drop-in systems for GP services. More work is needed to improve access to services such as occupational therapy, physiotherapy, speech therapy and professional counselling, and to independent outreach services such as free meals at home, home nursing, free handyman service, etc. With the increasing burden of restricted mobility and disability, extended families will find their resources stretched with increasing demand due to population ageing. Carers may not cope, and ways will have to be found to support them with specific outreach and relief services (WHO, 2004).

Mortality and morbidity indicators are also mentioned in "Health21" as means to assess target achievement. Local projects

such as the Maltese Transition project (Soler and Okkes, 2004) exemplify how PHC can participate or lead in research, and provide accurate community based morbidity indicators that can be used at local and national levels.

The skew in the proportion of productive workers per pensioner may generate social inequalities and possibly limit the national budgets available for health care. This could create tensions in the equity of health delivery. Would productive workers be prioritised over pensioners? Regardless, health at the workplace should be a priority for our practice to preserve health and support economic growth.

Another important factor will be the increased patient-doctor contact time, and increasing costs of prescribing. One can see from table 3 that Maltese elderly consult nearly twice as much as the 25-44's, and in table 4 one can see the markedly increased quantity of standard daily doses of drugs prescribed. In one Scandinavian study, 1/4 to 1/3 of the population in the oldest age groups visited their general practitioner in a 4-week period (Grimsmo et al, 2001).

Similar thoughts and concerns were expressed during structured discussions by the first author's fellow Maltese and European students in a recent University of Ulster MSc in General Practice and Primary Care in 2005. Based on their experiences as family doctors in primary care, most agreed that changes in disease patterns and health, changing needs and increasing expectations and demands, are causing a situation to develop where resources are skewed against demand, and their availability is limited. Traditional family and community networks are stretched by these tensions, and a real threat to equity, accessibility and sustainability of current health care models exists. New, long-term, pro-active and health preserving approaches are needed, and future PHC providers have to be more sensitive to needs and more cost-effective. Some students pointed out that this situation would put PHC providers in increasingly untenable situations of incrementing workload but potentially less remuneration, whilst others expressed novel ideas such as incentives for GPs not to retire, or providing a specifically "elderly-friendly" service.

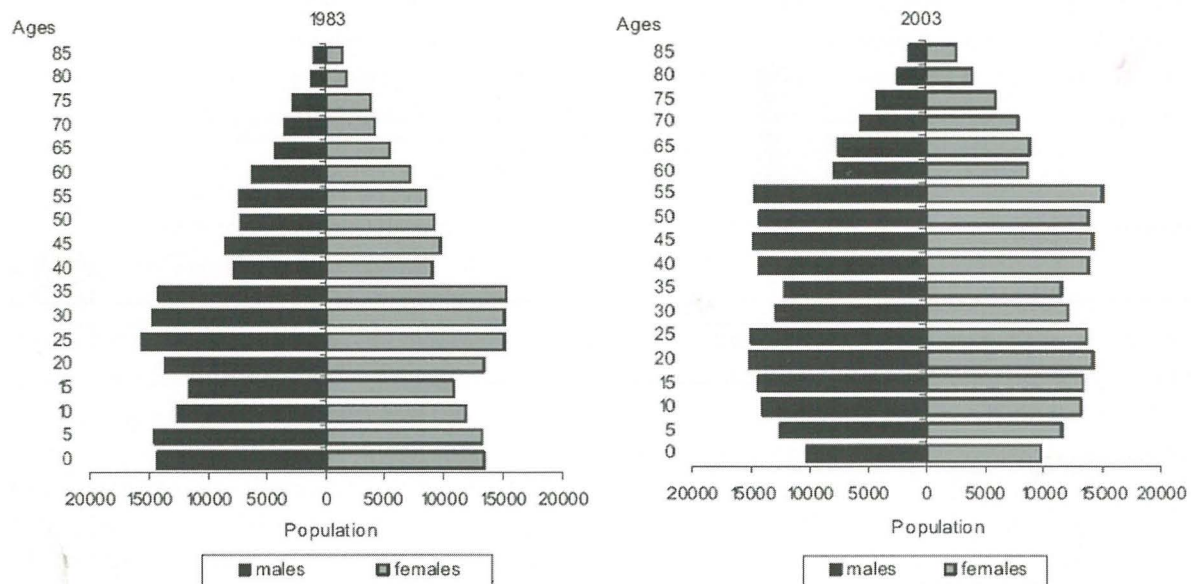
Conclusion

Longevity is a modern day phenomenon which, as discussed above, presents a huge challenge for the caring services, in particular for primary care. It seems apparent that family medicine will play a central role in rising to the challenges as complex as: dwindling resources, managing equity, increasing workload, increasing chronic non-communicable disease, spiralling multi-morbidity, and higher priority for preventive measures to preserve disability-free life expectancy. No panacea or blue print is readily available, but what is apparent from primary care models emerging elsewhere is the need to: i) directly increase patient involvement in their care, ii) work inter-sectorally to share and manage finite resources to meet identified needs, and iii) for further research to design, monitor and evaluate systems and services in order to respond to the burgeoning needs associated with longevity.

Appendices

Graph 1. Maltese population pyramid, 1983 and 2003. (Demographic Review 2003, 2004, p v)

Graph 1. Population Pyramid



1. Tables and figures

Table 1. Distribution of diagnostic titles within episodes of care clustered by ICPC chapter, 65+ (X Axis). Rates expressed as episodes per 1000 patient years (Y axis). (Soler, 2005).

ICPC Chapters: A – general; B - blood, immune system; D – digestive; F – eye; H - ear (hearing); K – circulatory; L – musculoskeletal; N – neurological; P – psychological; R – respiratory; S – skin; T - metabolic, endocrine; U – urological; W - women’s health, pregnancy, family planning; X - female genital; Y - male genital; Z - social problems

Top 20 of episodetities NX 65+ (n=4813) p1000py

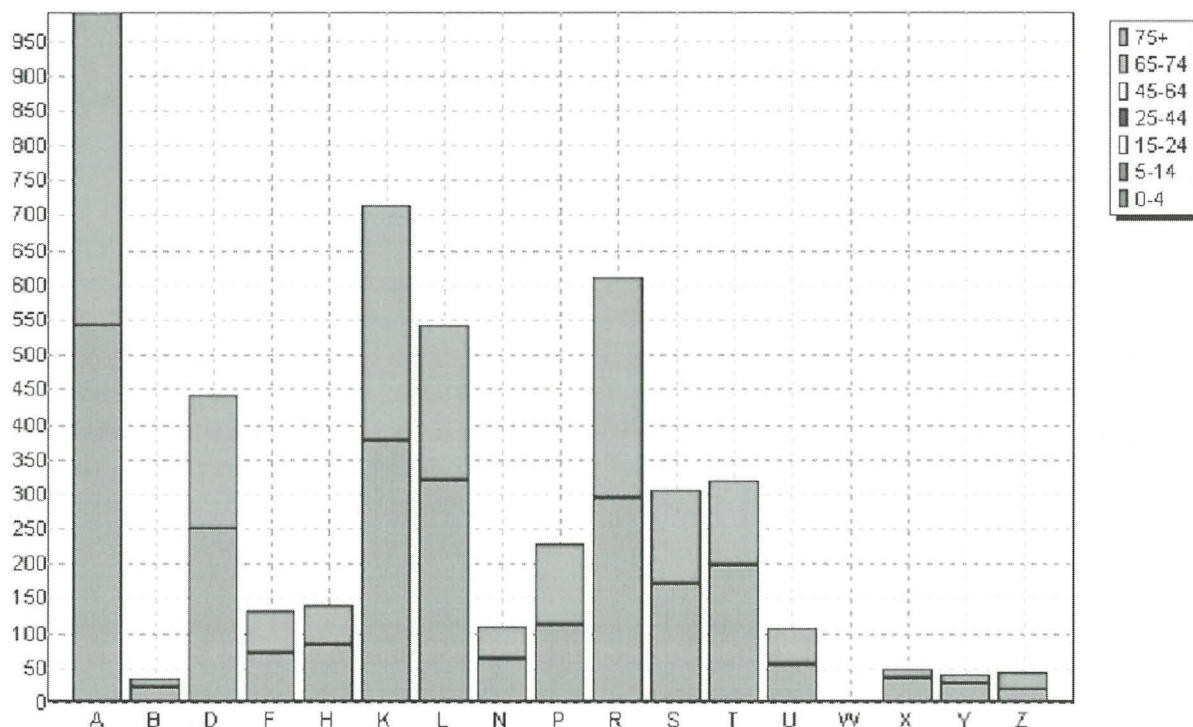


Table 2. Distribution of diagnostic titles within episodes of care clustered by ICPC chapter, all age groups (X axis). Rates expressed as episodes per 1000 patient years (Y axis). (Soler, 2005)

ICPC Chapters: A – general; B - blood, immune system; D – digestive; F – eye; H - ear (hearing); K – circulatory; L – musculoskeletal; N – neurological; P – psychological; R – respiratory; S – skin; T - metabolic, endocrine; U – urological; W - women’s health, pregnancy, family planning; X - female genital; Y - male genital; Z - social problems

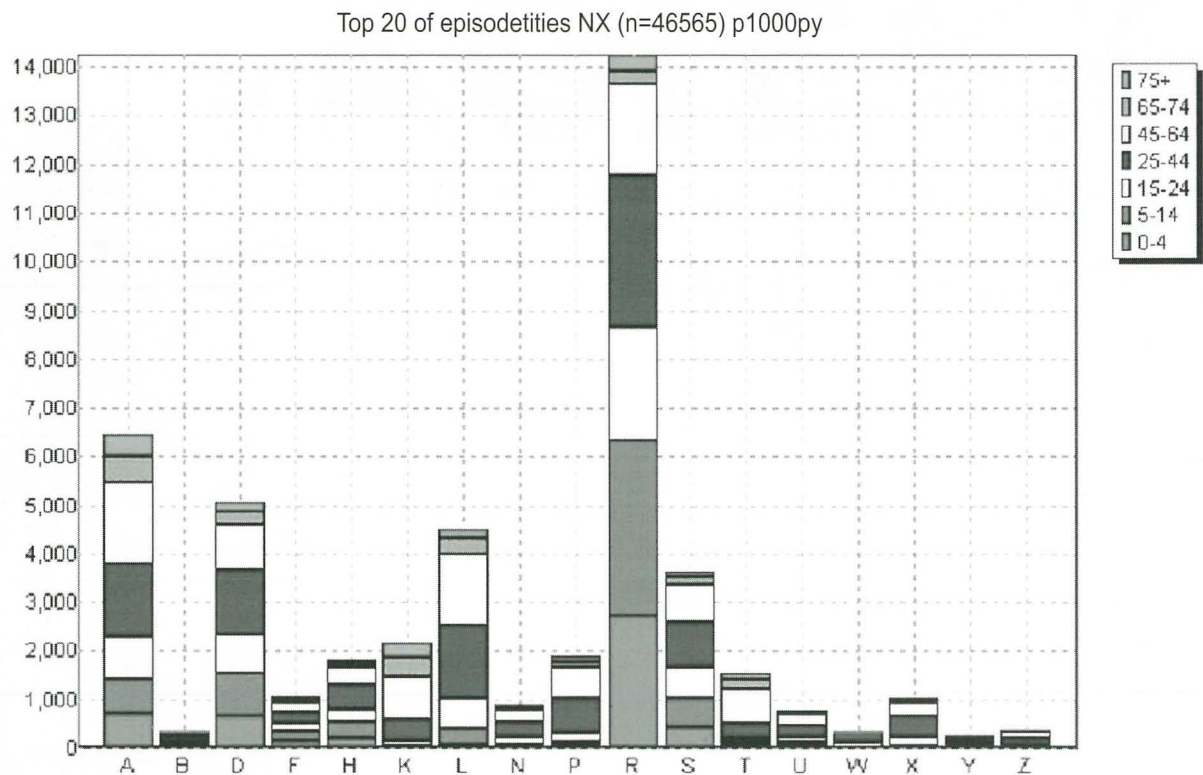


Table 3. Distribution of consultations per patient per year (X axis) by age and sex (Y axis). (Soler, 2005)

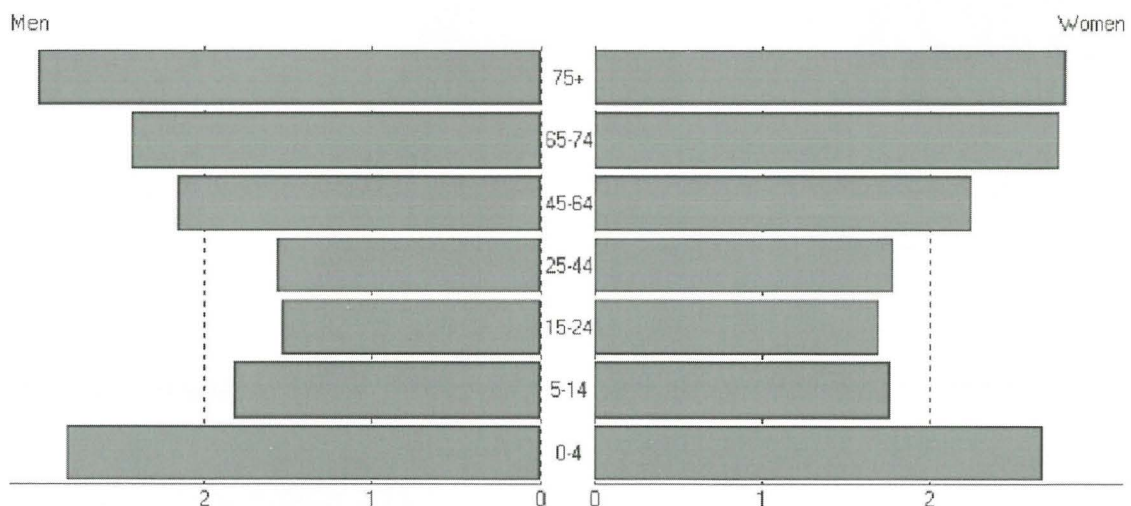
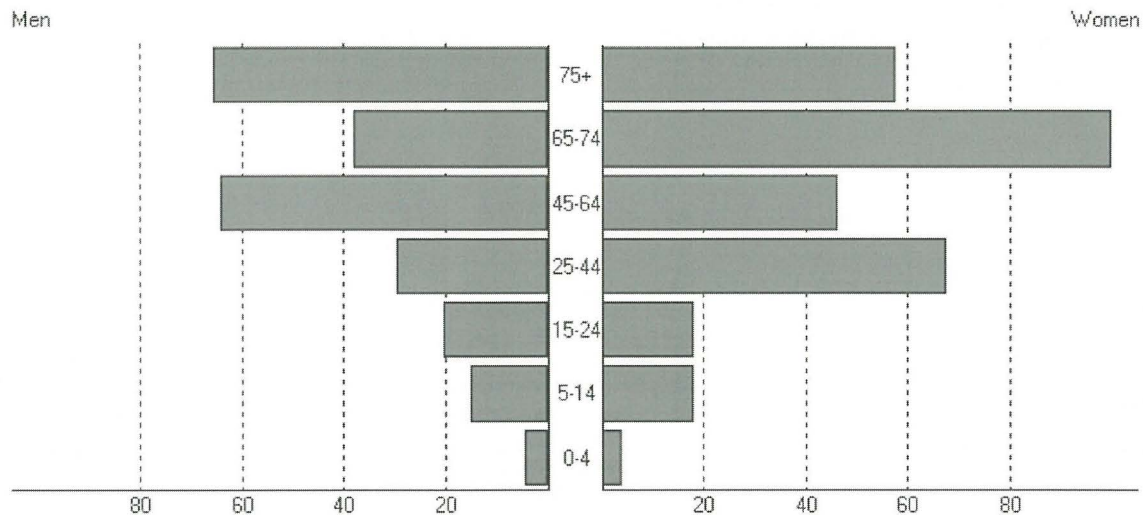


Table 4. Sex-age (Y axis) distribution of prescribed defined doses (WHO 2001) of medication per patient year (X axis) standardised for Maltese population in 2002. (Soler, 2005)



Box 1. "Health21" policy document Target 5 – "Healthy Ageing". Summary taken from Annex 2. (World Health Organisation, 1999)

By the year 2020, people over 65 years should have the opportunity of enjoying their full health potential and playing an active social role.

In particular:

5.1 there should be an increase of at least 20% in life expectancy and disability-free life expectancy at age 65 years;

5.2 there should be an increase of at least 50% in the proportion of people at age 80 years enjoying a level of health in a home environment that permits them to maintain autonomy, self-esteem and their place in society.

This target can be achieved if:

- public policies including those related to housing, income and other measures that enhance people's autonomy and social productivity, take full account of the needs and views of older people;
- health policies prepare for healthy ageing through health promotion and protection at earlier ages;
- health and social services at community level support the elderly in their everyday lives according to their needs and views, reach out to them and help them to become more active and to help themselves;
- each community develops programmes that coordinate, monitor and evaluate the services available to the elderly and ensures that sufficient resources are available for this task;
- policies allow older people to use the capacities remaining to them and provide access to appropriate care, outreach services, appliances and social support.

Suggested areas for formulating indicators:

- Mortality indicators related to appropriate age groups and causes of death
- Available statistics on morbidity and disability among the elderly

Dr. Jean K SOLER and Mrs. Paula WALLS

Corresponding author: Dr. Jean K Soler MD
Josephine, St. Catherine Street, Attard, Malta

References

Demographic Review 2003. (2004). Valletta, Malta: National Statistics Office (p v, ix, 15).

Dowling, B. & Glendinning, C. (2003). *The New Primary Care. Modern, Dependable and Successful*. England: Open University Press.

Grimsmo, A., Hagman, E., Falko, E., Lars, M., & Njalsson, T. (2001) Patients, diagnoses and processes in general practice in the Nordic Countries. *Scandinavian Journal of Primary Health Care*, 19(2), 76-82.

Hofmans-Okkes, IM., & Lamberts, H., (1996) The International Classification of Primary Care (ICPC): new applications in research and computer-based primary care information system. *Family Practice*, 13, 294-302.

Loudon, I., Horder, J., & Webster, C. (1998) *General Practice Under the National Health Service 1948 – 1997*. Oxford: Clarendon Press.

Metsemakers, JFM., Hoppener, P., Knottnerus, JA., Kocken, JJ., & Limonard, CBG. (1993) Computerised health information in the Netherlands: a registration network of family practices. *British Journal of General Practice*, 42, 102-106.

Soler, JK. (2005) *Illness amongst the Elderly*. Paper presented at the Symposium on the Elderly of the Malta College of Family Doctors, February 12th Qawra, Malta.

Soler, JK., & Okkes, IM. (2004) Sick leave certification: an unwelcome administrative burden for the family physician? *European Journal of General Practice*, 10(2), 50-55.

Starfield, B., Lemke, KW, Bernhardt, T, Folds, SS., Forrest, CB., & Weiner, JP. (2003). Comorbidity: Implications for the Importance of Primary Care in 'Case' Management. *Annals of Family Medicine*, 1(1), 8-14.

Strauss, S.E., Richardson, W.S., Glasziou, P. & Haynes, R.B. (2005). *Evidence Based Medicine*. (3rd Edition). London: Elsevier, Churchill Livingstone.

Van den Akker, M. (1999) *Multimorbidity in a general practice population. Prevalence, incidence and determinants of multiple pathology*. Maastricht: Netherlands School of Primary Care Research.

Wilson, IA., Lawson, IR., & Brass, W. (1962). Multiple disorders in the elderly. A clinical and statistical study. *The Lancet*, 2, 841-843.

World Health Organisation. (1999). *HEALTH21: the health for all policy framework for the WHO European Region*. No. 6., Geneva: World Health Organisation.

World Health Organisation. (2001). *Guidelines for ATC classification and DDD assignment*. 4th edition, Oslo: WHO Collaborating centre for drug statistics and methodology.

World Health Organisation. (2004). *Active ageing: Towards age-friendly primary health care*. Geneva: World Health Organisation.