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The State of Ageing and Health in Europe

International Longevity Centre-UK and
The Merck Company Foundation

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About this report:

The State of Ageing and Health in Europe 2006 is the fourth volume of a series that presents a snapshot of the entire health and ageing landscape in different regions of the world.

This is the first time that the series has focused the international spotlight on the health of older adults in the European Union. It presents the currently available information and statistics on the health of older adults and presents specific *Calls to action* for policy makers based on these data.

The State of Ageing reports are supported by The Merck Company Foundation and produced with various partner organisations that are recognised as leaders in the ageing field.

Foreword

The International Longevity Centre UK is an organisation dedicated to promoting an awareness of and solutions to the policy challenges of population ageing. That is why we are so pleased to join with The Merck Company Foundation in generating *The State of Ageing and Health in Europe*. The idea that echoes throughout this publication is that the ageing of the population is to be celebrated: disease and disability do not have to be synonymous with growing old. *The State of Ageing and Health in Europe* provides information and recommendations on exactly how we can ensure this and help give older adults throughout the European Union longer and better lives. We hope that this volume may help European societies address the issues of ageing in a positive and constructive way within their health and social care systems and accompanying policies.

Baroness Sally Greengross, Chief Executive, ILC-UK

Entirely supported by Merck and Co., Inc., Whitehouse Station, NJ, USA, which operates in Europe as Merck, Sharp & Dohme (MSD), The Merck Company Foundation is a philanthropic organisation that supports initiatives to enhance the health and well-being of people around the world. As demonstrated by MSD's century long commitment to the Merck Manuals, this includes getting health information into the hands of everyone who needs it. The *State of Ageing and Health in Europe* not only provides the latest information on health and ageing in the European Community, it also presents recommendations and *Calls to action* on what policy makers, practicing physicians and public officials can do to promote good health, prevent disease and postpone disability among older adults. This work performs a unique service in that it is simultaneously reference book, road map and blueprint and that its ultimate goal is to help transform the promise of active ageing into reality.

David A. Ruth, Executive Vice President, The Merck Company Foundation, Whitehouse Station, NJ, USA

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Executive Summary

Europe's ageing population

Europe is the world's oldest continent in demographic terms. By 2050, one-third of Europe's population will be over 60, compared to 13% who will be under 16. The number of people over 60 will increase by 44% between today and 2050. The number of 'oldest old' aged 80+ is expected to grow by 180%.

Europeans enjoy amongst the highest levels of life expectancy in the world: 75.1 years for men and 81.4 for women. Life expectancy has been rising on average by 2.5 years per decade in Europe.

There is growing evidence that not only are we living longer, but we are also living healthier lives. Overall disability levels amongst older Europeans are decreasing, not increasing.

But because there are more older people overall, the absolute numbers of dependent older people may increase in future. Policy makers must take into account the needs of an ageing population in the planning, delivery and organisation of services.

A heterogeneous older population

There is a tendency to lump all persons over 60 together as a homogeneous group. In many ways, this is the equivalent of assuming that all people under 40 have the same health needs.

Lack of informative data on persons aged 60 and over exacerbates this tendency. There is a clear need for better health statistics stratified by age group within the older population. These data will better inform and guide future health policies.

Diversity within the older population must also be taken into account in policies and clinical practice. Care must address individual needs, preferences, social and cultural circumstances and always aim to be person-centred.

Regional diversity within the EU

Life expectancy (LE) ranges from 71 in Estonia to 80 in Italy. LE at birth is on average 4 years lower in the EU-10, with the exception of Cyprus and Malta, where LE rates are closer to those of EU-15 countries.

Most of the difference in LE is due to preventable and premature mortality. Men aged 35-55 living in Central Eastern European countries (CEE) have a 2-fold higher risk of death compared to men of the same age in EU-15. The average gap in LE between men and women is 8 years in EU-10 compared to 6 years in EU-15 countries.

Targeted public health campaigns may help reduce these regional inequalities. Lessons can be learnt from successes achieved in some countries and applied to others, whilst remaining sensitive to cultural contexts and specificities.

Important health inequalities

Important inequalities in life expectancy and overall health status are also found within European countries. Certain 'forgotten' groups of older people are at greater risk of ill-health than others. These include older women, members of ethnic and cultural minorities, socially isolated and disabled older people.

As in other age groups, poverty and lower socio-economic status increase the risk of ill health. Poor older persons have a 30-65% higher risk of almost all chronic diseases than those in more privileged social groups.

Further research is needed to understand the particular barriers in access, quality and outcomes of care that different vulnerable groups may face as they age across Europe. A stronger evidence base may help inform policy solutions.

Targeted actions are needed to empower these groups and engage them in their health and well-being. Equity of access to services is critical.

Forgotten groups: older women

It is often said that 'men die quicker but women are sicker'. Risk of mortality is higher for most chronic conditions in older men, however women present a much greater risk of disability as they age, mostly due to the presence of multiple conditions (co-morbidities).

In research, older women are often neglected as an important subgroup. As patients, they may take on a passive role. Many older women are carers and may devote their energies to caring for relatives at the expense of their own health. Women typically do not allow themselves time to convalesce in the same way as men.

The health care system has an important role to play in ensuring that the needs of older women are addressed in policies and service provision.

The shift towards chronic disease

With the ageing of its population, Europe has seen a major shift towards chronic illness. The prevalence of most chronic conditions rises with age, particularly stroke, heart disease, cancer, cataracts, risk of falls and incontinence.

In persons over 65, cancer and cardiovascular disease together account for around three quarters of all deaths in nearly every European country.

Many chronic conditions will occur at the same time in the older person, leading to significant disability and posing complex challenges to disease management. Integrated care models, which bridge across health and social care, are needed to help manage chronic conditions effectively in the community setting.

The rise of chronic illness also demands that policy makers recognise the needs of informal carers when developing long-term care policies. With increasing decentralisation of services across Europe the burden of informal carers is likely to increase. The vital role of this group cannot be taken for granted. Without support, many will fail to cope and the older people they are caring for will 'fall through the net'.

The burden of late-life depression

Only cardiovascular disease has a greater toll on morbidity and mortality than depression. Yet depression remains under-recognised and highly stigmatised across Europe.

Depression affects 10-15% of persons over 65. Older persons with depression are 2-3 times more likely to have 2 or more chronic illnesses and 2-6 times more likely to have at least one limitation in their activities of daily living.

Depression is the major cause of suicide in European older people. Rates of suicide and self harm are approximately 26% higher in Europeans over 65 than amongst the 25-64 age groups. In 90% of EU countries, the suicide rate is highest in those over 75.

More appropriate medical training, increased social awareness and better access to treatment options are needed to prevent, diagnose and treat late-life depression.

The higher risk of depression in older women and in persons of lower socio-economic status deserves particular attention.

Prevention is for older people too

Most health promotion and public health campaigns tend to focus on changing behaviours in younger people. Yet there is a need to ensure that the right public health messages are being given to all generations.

Prevention may help reduce the burden of some of the most common diseases of later life in terms of quality of life and health resource use. If implemented from midlife onwards, targeted actions may prevent and postpone the onset of cardiovascular disease, dislipidemias, stroke, hypertension, and dementia. Many preventive interventions in later life have been shown to be cost-effective.

Modifiable risk factors

Efforts to modify lifestyle behaviours should be targeted over the entire lifecourse.

Four main factors stand out as allowing people to enjoy better health in older age: a healthy diet, non-smoking, physical exercise and moderate alcohol use.

Good nutrition is of critical importance to people as they age. The risk of obesity in particular may accumulate over the lifecourse of individuals. An often neglected facet to nutrition is malnutrition. Malnutrition in older people is prevalent across all clinical and community settings. Persons over 80 admitted to hospital have a 5 times higher prevalence of malnutrition than those under 50.

Measuring disability and functioning in later life

As mentioned previously, there is encouraging evidence that disability levels are decreasing as the population gets older. Yet with the risk of multiple morbidity in later life, preventing disability remains a main objective of care.

On average, 18% of people 65-74, 28% of people 75-84 and 39% of people 85 and older have severe difficulties in carrying out their activities of daily living.

Disability-free life expectancy at 65 shows significant variability across Europe. Intra-country differences are difficult to interpret, however they suggest that older people across Europe may enjoy very different levels of quality of life as they age. Further research is needed to understand the reasons behind these differences.

'Objective' measures of functional ability have been developed to overcome the cultural biases inherent in self-reported measures of disability. Of these, walking speed and grip strength have been shown to be reliable measures of physical functioning in older people. They are also independent predictors of mortality.

Better indicators are needed to allow us to measure not only health status but quality of life and functional abilities of individuals as they age.

Special focus: Alzheimer's disease

Alzheimer's disease has been called the 'plague of the 21st century'. There are 5.5 million cases in Europe and more new cases per year than stroke, diabetes or breast cancer.

Too many physicians still adopt a somewhat nihilistic attitude towards treating Alzheimer's disease. Physicians across Europe need better training to recognise and treat Alzheimer's disease effectively. For example, a Polish survey estimated that only 10% of practicing GPs were able to recognise the symptoms of dementia.

There is currently no cure for Alzheimer's disease, however prevention and early diagnosis may play a huge role in delaying the onset of severe disease. Medicines are available but are often viewed as 'too expensive'. Significant barriers to access exist across Europe. Finding better treatment options remains a priority as is greater investment in research.

Stigma surrounding Alzheimer's disease needs to be reduced. Caring for a relative with Alzheimer's disease has been described as 'life changing, exhausting and stressful'. Support for carers is urgently needed.

Governments have a key role to play in raising awareness and improving outcomes for sufferers of dementia. Significant resources will be required to address the clinical and social aspects of Alzheimer's disease. New models of care that span across health and social care are needed. Budget projections need to take into account the magnitude of the costs borne by families.

1 Introduction: The European context

The continent of Europe ranges from the Portuguese coast in the West to the Ural mountains in Russia. This report is concerned with the 25 European Union (EU) member states.

Before 2004, the EU consisted of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom (the EU-15). In May 2004, 10 new member states joined (the EU-10), comprising Cyprus, Malta, five Central and Eastern European (CEE) nations (the Czech Republic, Hungary, Poland, Slovenia, and Slovakia) and 3 Baltic states (Estonia, Latvia and Lithuania). Together, the EU-25 represents 455 million people, 380 million in the former EU-15 and 75 million in the EU-10.

There is no 'one' Europe from a health perspective. Health indicators vary significantly relative to a European average. The countries of the European Union are very different in terms of their history, culture, economic status, geography and demography. These differences have strong repercussions on the cultures of care and ageing and health profiles across countries.

There is also a clear divide between the former EU-15 and EU-10 member states. The Central and Eastern European (CEE) and Baltic states all saw a transition, over a very short time period, from a centralised Soviet Semashko model of health care dominated by hospitals to social insurance schemes focused on primary care. In many countries of CEE, this change happened as recently as five years ago.[1] Health care systems in this region are still adapting to their new societies. In that sense, Cyprus and Malta stand out within the EU-10 – and indeed their health profiles are often closer to that of the EU-15 member states than to the other EU-10 countries.

This report features data from several sources. We have drawn most EU-level data from Eurostat, the EU's central statistics office in Luxembourg. Further European-level data were drawn from the Organisation for Economic Cooperation and Development (OECD), the United Nations (UN) and their subsidiary organisations and the European office of the World Health Organisation (EURO WHO).

Differences in the way different data sources define 'Europe' must be borne in mind when interpreting data. The Euro-WHO Health For All (HFA) database reports data for the entire European region. Maps, therefore, present data for all of Europe and not just the EU-25.

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1 GVG 2003

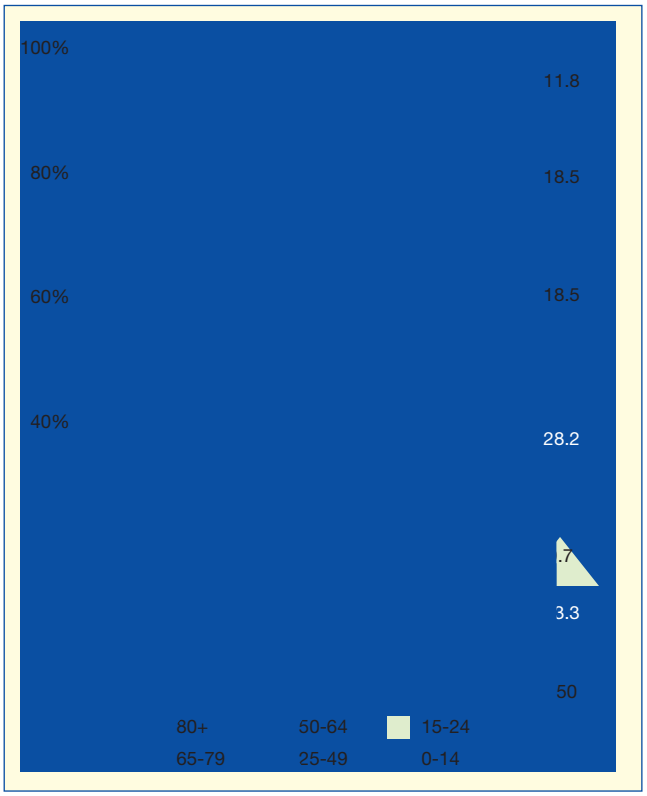
2 Who are the older people of the European Union?

2.1 Demographics

Population ageing in Europe

Europe is the world's oldest continent in demographic terms. It has the highest median age of all continents (38 years). *By 2050, one-third of Europe's population will be over 60*, compared to 13% who will be under 16.[2] 58% of older people will be women. The number of older people (over 60) will increase by 44% between today and 2050. The number of 'oldest old' or very old people (aged 80+) is expected to grow by 180%.

Fig. 1: Age distribution of EU population 1950 to 2050 (projected).



2.2 Implications for health and social care systems

Sustainable financing of healthcare systems

It is often said that the ageing of the population will bankrupt our health care systems. Yet there are several reasons to believe that the 'catastrophic' view of the impact of ageing on health care systems is misguided:

First, there is growing evidence that *disability levels amongst older Europeans are decreasing, not increasing*.[3] But because there will be more older people overall, the absolute numbers of dependent older people may increase in future. On balance however, the impact on future increased demand for care may be mitigated to some extent by improvements in the overall health status of older persons.[4]

Secondly, macroeconomic studies strongly suggest that ageing is not the main factor explaining the rise in health expenditure.

Finally, although aggregate costs for the older segment of the population may be higher, this is not true at the individual level. *Older persons often incur lower health care costs compared to individuals of a younger age with the same condition*.[5] This may be in part because they receive less intensive treatments. Also, the highest costs of care occur in the last 12-18 months of life and this is true at any age. Thus it is not the cost of ageing that is high, but the cost of dying.

Gaps in long-term care

Gaps in service provision in both residential (nursing home) and home care are consistent across Europe. A recent UK study estimated that expenditure on long-term formal care in the UK would need to rise by 315% by 2051 to meet current demographic pressures if dependency rates remain unchanged.[6] Planning for long-term care must factor in changing family patterns with a growing number of single-person households emerging in the older population.

The role of informal care

Between 65-80% of older people are cared for by their relatives. In many instances, informal care is the only option available as home care services are very poorly developed. This is particularly true in CEE and the Baltic states.

Changes in the content, not the quantity of care

So much attention is focused on anticipating how ageing will increase the *quantity* of care needed that its impact on the *content* of care is sometimes sidelined.

Ageing is not a disease in itself. But as people age, their likelihood of presenting with chronic conditions, often many at the same time, increases. Most of these conditions are managed in the community, not in acute-care hospitals. Management of these conditions requires a patient-centred, integrated approach aimed at reducing disability and fostering independence over a long period of time.[7] The current division between health and social care causes many older people to 'fall through the net'.

Meeting these needs has profound implications for the redesign of health and social care systems. The proven benefits of community-based comprehensive geriatric assessment and rehabilitation[8] and nurse-led clinics for patient outcomes,[9] for example, represent new challenges in professional capacity and changing professional roles.[10]

A call to action

The ageing of the population is seen as a major challenge to Europe's societies and economies. But this challenge is also a tremendous opportunity – as long as we ensure that our societies are ready to accommodate an age-diverse population.

National governments have a clear responsibility to plan now to adapt all aspects of social policy to these demographic changes. Attitudes and behaviours need to change throughout society. We need *cohesive social policies that ensure that all aspects of our society foster age diversity* and allow the older like the younger segments of the population to enjoy *full and active citizenship.*

In healthcare, specific calls to action are:

- We must move away from the catastrophic and short-sighted view that older people are a drain on our healthcare resources.
- Policy makers must *take into account the ageing population* in policy, planning and service delivery.
- Governments and practicing physicians must recognise that *prevention may be effective in reducing the burden of some of the most common diseases of later life*, such as type 2 diabetes, hypertension and dyslipidemias. Actions targeted at modifying lifestyle behaviours, for example stress, obesity and tobacco use, are *needed over the entire lifecourse*. If implemented from midlife onwards, these actions may prevent and postpone the onset of cardiovascular disease, stroke and dementia in later life.
- *Better information* is needed for older persons and their families to enable them to navigate an increasingly complex health care system.
- *Better research and evidence* on the health status, needs and preferences of older people is required to inform policies.
- A more sustainable[11] model of care that allows for better continuity and coordination of care between primary, secondary, tertiary and social care as well as across the private, public and voluntary sectors is required.
- With increased decentralisation of health and social services, we risk seeing *significant shortages in skilled staff in the community*[12]*. Governments must invest further in community services and work closely with the voluntary and private sectors*, who are playing a growing role in filling the service gap across many communities.

A call to action

Reducing socio-economic disparities

Health care is a recognised universal right across all European countries. Thus it is paradoxical that 'despite decades of universal healthcare coverage, large socio-economic disparities in physical health and functioning exist in all European countries'.[18]

The topic of health inequalities has been high on the government agenda in a number of European countries over the past decade. In the UK for example, a Health Inequalities Commission was set up in 2000 to try to address the divide between the best-off and worst-off in society. In France, a comprehensive public health framework was initiated in 2003 to redress inequalities across all health outcomes.

But these public health programmes, whilst welcome and bold initiatives, too often focus solely on younger people and do not acknowledge the role of social determinants of health in later life. *It is essential to recognise that the excess disability and mortality in more disadvantaged older people constitutes a significant public health problem*.[19] Targeted actions towards less advantaged older people are needed in order to reduce disparities in health outcomes and ensure equity of access to health services for less advantaged older people.

A stronger research base

A starting point for finding policy solutions to address socio-economic disparities is to develop a stronger research base. Studies analysing the role that different socio-economic factors (educational level, poverty, living conditions) play throughout people's lives and into old age have only emerged recently in the literature. Many more are needed so that we may better understand what factors affect health outcomes throughout people's lives.

The most powerful research tools to provide a lifecourse perspective on inequalities are longitudinal studies. For example, the English Longitudinal Study of Ageing (ELSA) revealed that people in routine or manual occupations reach a state of poor health and disability on average 15 years earlier than professionals or managers.

From a policy perspective, *age needs to be considered as part of the health inequalities debate*. The impact of socio-economic factors, gender, and age must be viewed together as they affect individuals' chances of achieving the best possible health outcomes into advanced age.

2.3 A heterogeneous 'older' population

The older segment of the population is anything but a homogeneous group. Any individual 65 or 75 year old is unlikely to present as the 'average' 65 or 75 year old.[13] Older people do not all have similar health status, nor the same health care needs. Individualised care, which is culturally-sensitive and responsive to each person's needs, preferences and personal circumstances, is as important in this age group as in others.

Socio-economic inequalities

It is increasingly recognised that poor socio-economic status and poverty lead to poor health. Rising health inequalities are a growing concern in every single European country, with the gap between the worst-off and the best-off becoming greater over time.

Until recently, it was assumed that the gulf between rich and poor (or educated and less educated) was less of a concern in older populations. Age was thought to have a 'levelling off' effect on socio-economic inequalities. But recent longitudinal studies[14] have challenged these assumptions. Socio-economic disadvantage – be it measured by income, educational level, housing tenure or other factors – is associated with an increased risk of disability[15], chronic disease and co-morbidity, lung cancer mortality[16], depression and decline in cognitive function.[17]

2.4 Forgotten groups: older women

Every fifth person in Europe is a woman over 50.[20] Yet older women are rarely considered or studied as a vulnerable group in their own right.

The current generation of older women in Europe has had access to less education and professional training than older men, therefore they are at greater risk of poverty. Because they live longer, women are at greater risk of social isolation as they age. *Older women also have more chronic health conditions, multiple morbidities, disability and depression*.[21]

Older women are not good at taking care of themselves. Many older women bear important carer responsibilities towards relatives and friends, which may prevent them from focusing sufficiently on their own health and well-being. They often take a very passive patient role compared to men and may be under-treated as a result.[22] *Women typically do not allow themselves time to convalesce in the same way as men*. They are much less likely to request help in the home.

A particular example of this is cardiovascular disease (CVD). CVD *kills more women than all cancers combined, a fact that is little known by women, physicians and policy makers alike*. CVD also leads to significant disability in older women – although fatality rates are worse in men. Because oestrogen has a protective effect against risk factors for CVD, disease often manifests itself later in women than in men. Thus with the ageing of the population, a greater number of older women will be presenting with CVD. Yet data on the effectiveness of treatments in older women is scarce – until recently, the evidence base was on men only. Medical textbooks rarely describe CVD as a female disease. Symptoms may manifest themselves differently and standard diagnostic tests and procedures need to be adapted for women's bodies (e.g. using smaller catheters). Organisations such as the European Society of Cardiology and a number of national heart foundations across Europe have focused significant efforts over the past 5 years to raising awareness of the importance of CVD in women – particularly older women.

2.5 Forgotten groups: social exclusion and ethnicity issues

Across Europe, migrant and ethnic minority populations face significant social exclusion and stigma. Old age may exacerbate this isolation.

Different countries within the EU have very different profiles of ethnic communities. In the UK, older Black and Minority Ethnic populations are the highest users of primary care services, but they also have the worst health outcomes, due to multiple barriers to care.[23] In countries of Central and Eastern Europe, the Roma and cultural minorities face significant stigma and run the risk of being 'forgotten' in rapidly-evolving societies.[24] The traveller community in Ireland faces similar exclusion. Many older people live in rural areas where availability of appropriate services tends to be minimal.

A call to action

Forgotten groups require targeted efforts

The older segment of the population is often viewed as a vulnerable group in its own right. However, it is important to recognise that this 'group' is far from homogeneous and that within it, some subpopulations may be at greater risk of ill-health than others.

The first of these groups is *older women*, who *are rarely considered as an independent target group in their own right*. Policies aimed at older people are not 'gender mainstreamed' as they may be when targeted at younger people. Given that older women present greater risk of disability and co-morbidity and are more likely to neglect their own needs as they age, actions and programmes *need to reach out to them* specifically to 'sensitise' them to their own health needs. Special attention must be given to them in terms of access and outcomes of care.[25] And most importantly, efforts to *empower older women and engage them in their health* and well-being should be prioritised.

The same *Call to action* applies to other vulnerable groups within the older population: older persons living in rural areas, members of ethnic minorities and disabled older persons may be especially vulnerable to barriers in access to good quality care. For many of these groups, stigma, discrimination and social exclusion contribute to the usual barriers posed by age. Because many of these groups have traditionally been small in number, little data exists as to their health and health care situation. *Further research* is needed to understand the particular barriers in access, quality and outcomes of care that different vulnerable groups may face as they age across Europe.

Given the high risk of social isolation for many vulnerable older adults, policies that focus solely on public health will be insufficient. Instead, policies that *get to the root causes of social exclusion* are needed across all European countries.

Involving and engaging vulnerable older communities so that they take ownership for their health and social care solutions is key if culturally- and socially-appropriate solutions are to be found.

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25 MERI, 2004

3 The health of older people in the European Union

3.1 Life expectancy at birth

Europe has amongst the highest levels of life expectancy (LE) in the world. However LE at birth is far from uniform across countries, with more disadvantaged individuals dying much earlier on average than those of higher socio-economic status.

LE is higher for women than for men, and this gap is particularly high in CEE and Baltic countries: in Estonia, there is a 12-year gap in LE between the sexes. Much of this gap is attributable to premature mortality in men due to adverse risk behaviours. Within EU-15, France stands out as having a high gap between men and women (8 years).

LE varies significantly across the EU: it ranges from 71 in Estonia to 80 in Italy.[26] There is an average gap of up to 4 years between the older and newer EU member states. Due to accrued unhealthy behaviours and environmental factors, it is unlikely that these figures will converge before at least 2030.[27] Malta and Cyprus stand out amongst EU-10 countries as their LE levels are closer to those in the EU-15 region.

3.2 Life expectancy at 65

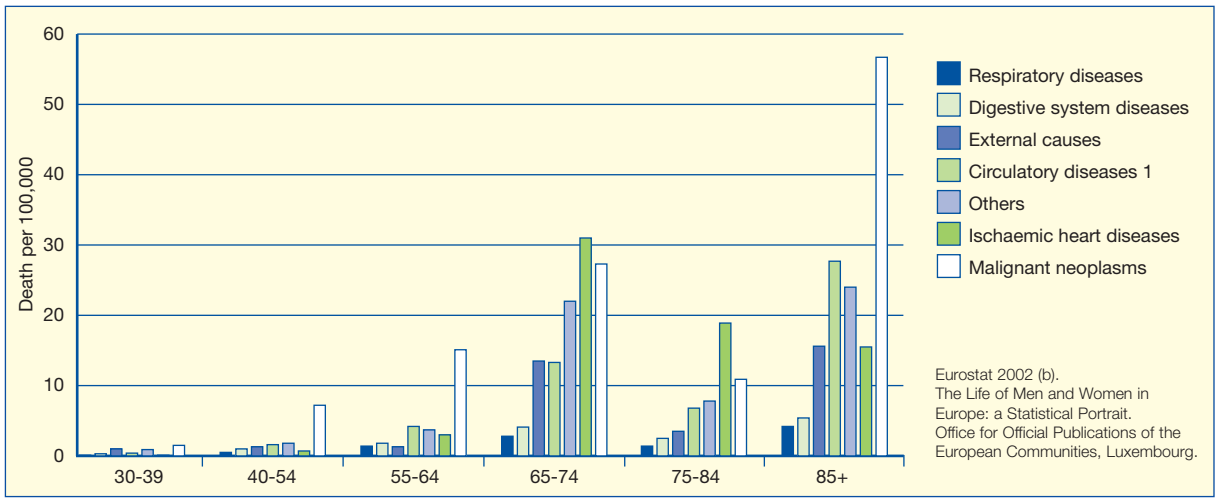
Whereas life expectancy (LE) at birth is an important indicator of overall life chances, *life expectancy at 65 gives an appreciation for the life chances of those who have reached older age*. Different factors (for example access to care) may determine LE at birth and LE at 65. Average LE at 65 is 18.2 years in the EU-25, 16.1 for men and 19.9 for women. A gap of two and half years exists between averages for the EU-10 and EU-15.

Fig. 2: Life expectancy at birth, EU-25, latest available, comparing former EU-15 & EU-10.

	Total	Men	Women
Sweden	80.1	77.7	82.3
Italy	80.3	77.1	83.2
Spain	79.9	76.3	83.3
Cyprus	79.4	77.3	81.5
France	79.4	75.5	83.2
Austria	78.9	76	81.6
Greece	78.9	76.3	81.7
Germany	78.8	75.7	81.6
Netherlands	78.8	76.4	81.1
Finland	78.7	75.3	82.1
Malta	78.6	76.3	80.8
United Kingdom	78.4	76.1	80.7
Luxembourg	78.1	74.9	81.2
Belgium	77.6	74.2	80.8
Denmark	77.3	74.8	79.5
Portugal	77.3	73.8	80.7
Ireland	77.2	74.6	79.9
Slovenia	76.6	72.6	80.4
Czech Rep	75.4	72.1	78.7
Poland	74.7	70.4	78.9
Slovakia	73.9	69.9	77.8
Hungary	72.6	68.4	76.8
Lithuania	72.2	66.5	77.9
Estonia	71.8	65.3	77.1
Latvia	70.9	65.7	76.0
EU-25	**78.3**	**75.0**	**81.4**
Former EU-15	79.1	76.0	82.0
New EU-10	74.3	70.1	78.4

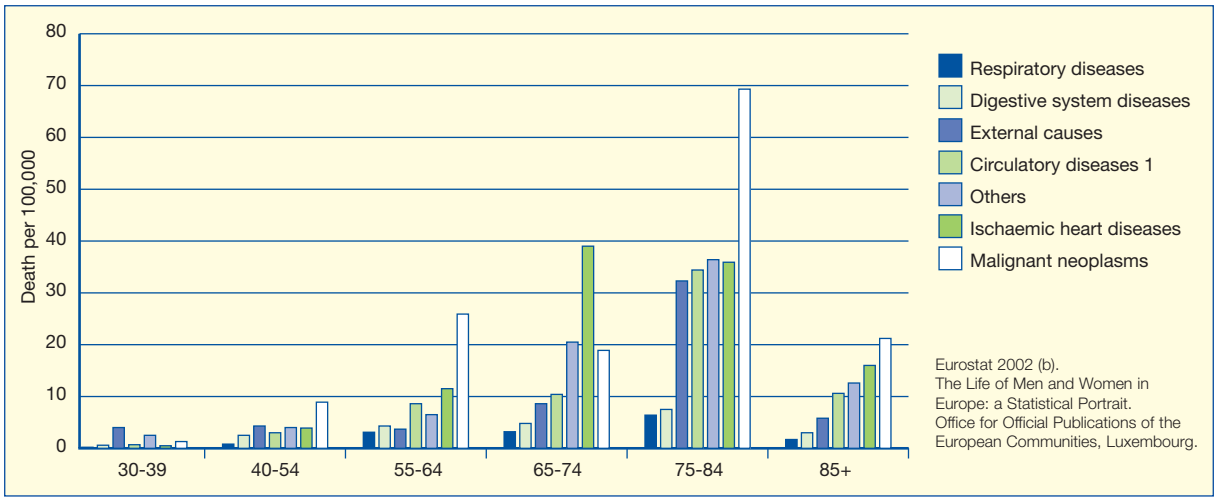
Source: HFA database 2005.

Fig. 3: Causes of death in women by age in the EU-15, 1998.



1: Excluding ischaemic heart diseases. Source: Eurostat 2002 (b).

Fig. 4: Cause of death in men by age in the EU 1998.



1: Excluding ischaemic heart diseases. Source: Eurostat 2002 (b).

3.3 The burden of chronic illness

With the ageing of its population, Europe has seen a major shift towards chronic illness.[28] *The prevalence of most chronic conditions rises with age, particularly stroke, heart disease, cataracts, risk of falls and incontinence*.

What is particularly startling in older people, particularly the oldest old, is the prevalence of co-morbidities. The risk of being disabled and dependent increases significantly with the presence of 2 or more chronic conditions.

Main causes of death by age group are illustrated for men and for women in the EU-15 in the two figures above.[29] The relative burden of different conditions varies significantly by age, and this is equally true within the 'over 65' age group.

Gender differences

It is sometimes said that '*men die quicker but women are sicker*'.[30] *Men are more prone to develop fatal disease, such as heart disease, diabetes, and lung disease*. After age 75, they have a significantly higher ratio of deaths to women for all diseases except for those of the musculoskeletal system, skin and connective tissue.[31]

Yet women have on average a 25-50% higher risk of chronic illness than men. They also have a higher risk of multiple morbidity: in the SHARE study of people aged 50 and over in 10 European countries, almost 50% of women over 50 were estimated to have two or more chronic conditions, compared to around 40% of men.[32] Larger proportions of men report having no long-term health problems and no limitation in activities compared to women.[33]

Socio-economic disparities across the board

Older persons belonging to lower socio-economic groups have a 30-65% higher risk of almost all chronic diseases than those in more privileged social groups. Whilst this is true across all countries, the gap between the best off and the worst off is particularly acute in countries of the CEE and Baltic states.

A call to action

Morbidity and mortality data are often presented for the population over 60 or 65 as a whole. Yet significant differences exist within the 'over 65' population by age group: for example, the prevalence of dementia increases from approximately 2% at ages 65-69 to 22% amongst 85-89 year olds.[34]

To lump together all health data for persons over 60 is as meaningless as presenting data for all persons under 40 together. Clearly, we need further stratification of available health statistics by age group than what is currently available in the major health databases. These stratified data will better inform and guide policies on the health of older people.

Fig. 5: Comparison of causes of death for women and men, EU-15 and EU-10 countries.

Causes of death as % of total, 2002*	Women		Men	
	Diseases of the circulatory system	Cancer (malignant neoplasm)	Diseases of the circulatory system	Cancer (malignant neoplasm)
EU-25	**45.7**	**22.0**	**38.1**	**28.2**
EU-15	**43.6**	**22.1**	**36.7**	**28.9**
Czech Republic	58.5	23.6	47.2	29.4
Estonia	62.8	17.4	46.3	19.9
Cyprus	38.8	9.3	40.2	10.7
Latvia	63.3	15.9	48.7	18.9
Lithuania	64.2	18.1	45.7	20.1
Hungary	57.2	22.4	45.3	27.1
Malta	47.8	21.7	40.8	25.8
Poland	53.1	21.2	42.8	24.6
Slovenia	44.4	24.1	32.7	29.0
Slovakia	62.9	19.8	48.5	25.3

 Source: Eurostat 2004 (b).

3.4 A strong regional divide

There is a clear divide in health status between the former EU-15 and the newer EU-10 member states. Overall mortality rates are highest in most countries of CEE and the Baltic States.[35] There is also a lot of variance within the EU-10 group of countries. For example, cardiovascular disease causes 63% of deaths in women in Slovakia and the Czech Republic, compared to 39% in Cyprus or 44% in Slovenia.

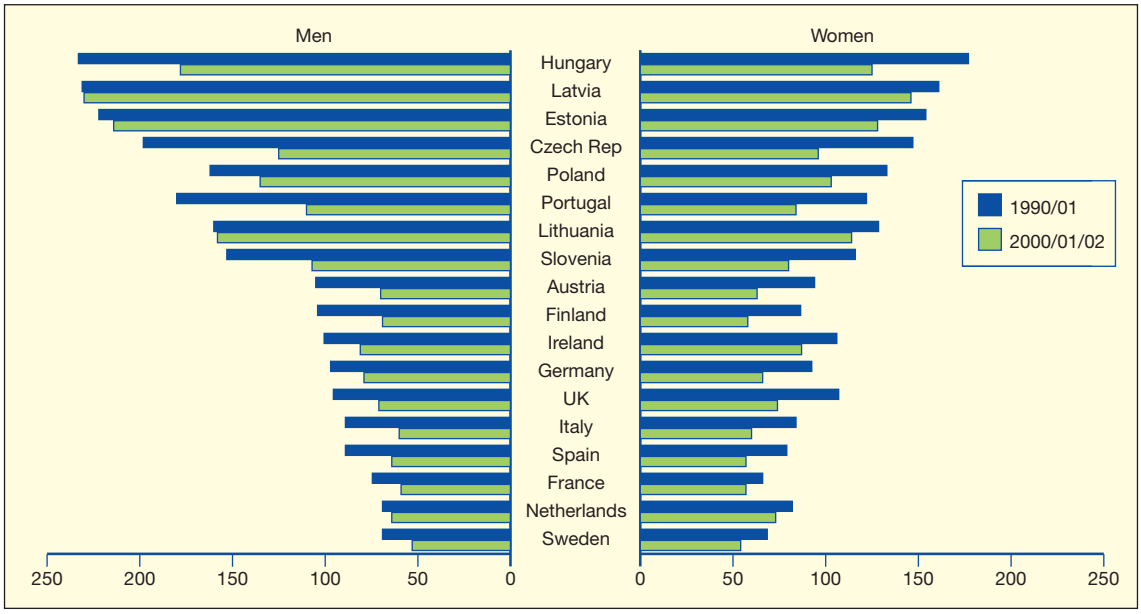
3.5 Premature or preventable mortality

Preventable and premature mortality accounts for much of the observed differences in life expectancy between EU-15 and EU-10 countries.

Preventable mortality pertains to conditions which may be prevented from occurring through effective interventions. These include causes that are highly related to lifestyle factors such as alcohol and tobacco (e.g. lung cancer and liver cirrhosis), diet (eg. obesity and diabetes) as well as road traffic accidents.

Treatable mortality is defined as mortality from conditions for which death may be averted by medical treatment even after the condition is developed. Treatable conditions would include appendicitis (amenable to surgery), hypertension (amenable to drug therapy), cancer of the cervix and the breast (amenable to screening).[36]

Fig. 6: Treatable mortality, men and women, 1990/1 and 2000/1/2 selected EU members.



Source: Newey, Nolte, McKee et al. 2004.

As can be seen in the figures above, rates of treatable mortality remain high in countries of CEE and the Baltic states. *Men aged 35-55 living in CEE have a 2-fold higher risk of death compared to men of the same age in EU-15*. For women, the gap is highest between ages 35-65, with a relative ratio of approximately 1.6. The gap in death rates decreases after age 65.

A call to action

Reducing premature and preventable mortality

Differences in life expectancy across Europe are due in great part to differences in treatable and preventable mortality. These, in turn, are a direct effect of *unhealthy behaviours which remain highly prevalent* in many of the Central and Eastern European and Baltic countries within the EU. In particular, smoking and drinking rates remain very high and nutritional awareness is low in these rapidly transitioning societies.

Thus differences in rates of treatable and preventable mortality across Europe are a clear signal *that targeted public health and health promotion campaigns* may help reduce these intra-country inequalities. *Lessons can be learnt from successes achieved in some countries* and applied to others, whilst remaining sensitive to cultural contexts and specificities.

Particular areas for targeted action include:

- *Cardiovascular disease*: The decrease in cardiovascular mortality observed in the EU-15 has not been matched in EU-10 countries, particularly in the 'middle age' years. Efforts to raise awareness of the risk of unhealthy behaviours (smoking, drinking, stress, poor nutrition) as well as improving access to care (eg. stroke units) are needed.
- *Cancer*: Cancer survival rates remain low in several countries, pointing to the need for better access to effective treatments.[37, 38, 39] *The regression in lung cancer mortality due to reduced smoking in men observed in many EU-15 countries has not yet been observed in EU-10 populations*.[40] Targeted campaigns to reduce smoking rates are urgently needed.
- *Cerebrovascular disease*: Poor awareness and control of hypertension is thought to underlie the rise in mortality in some countries, namely Estonia and Latvia.[41] Better access to blood pressure treatments is needed.
- *Communicable disease*: Rates of communicable disease remain high in some EU-10 countries. Case-fatality rates for tuberculosis, in particular, may be significantly reduced with timely treatment.[42] Solutions include better hygiene and public health standards in hospitals.

3.6 Main causes of death in older people

In persons over 65, cancer and cardiovascular disease together account for around three quarters of all deaths in nearly every European country.[43]

Cardiovascular disease [44]

Cardiovascular disease is responsible for half of total mortality of European men and women over the age of 60.[45] 9 out of 10 deaths due to cardiovascular disease occur in the over 65s.[46] Most are due to ischaemic heart disease.

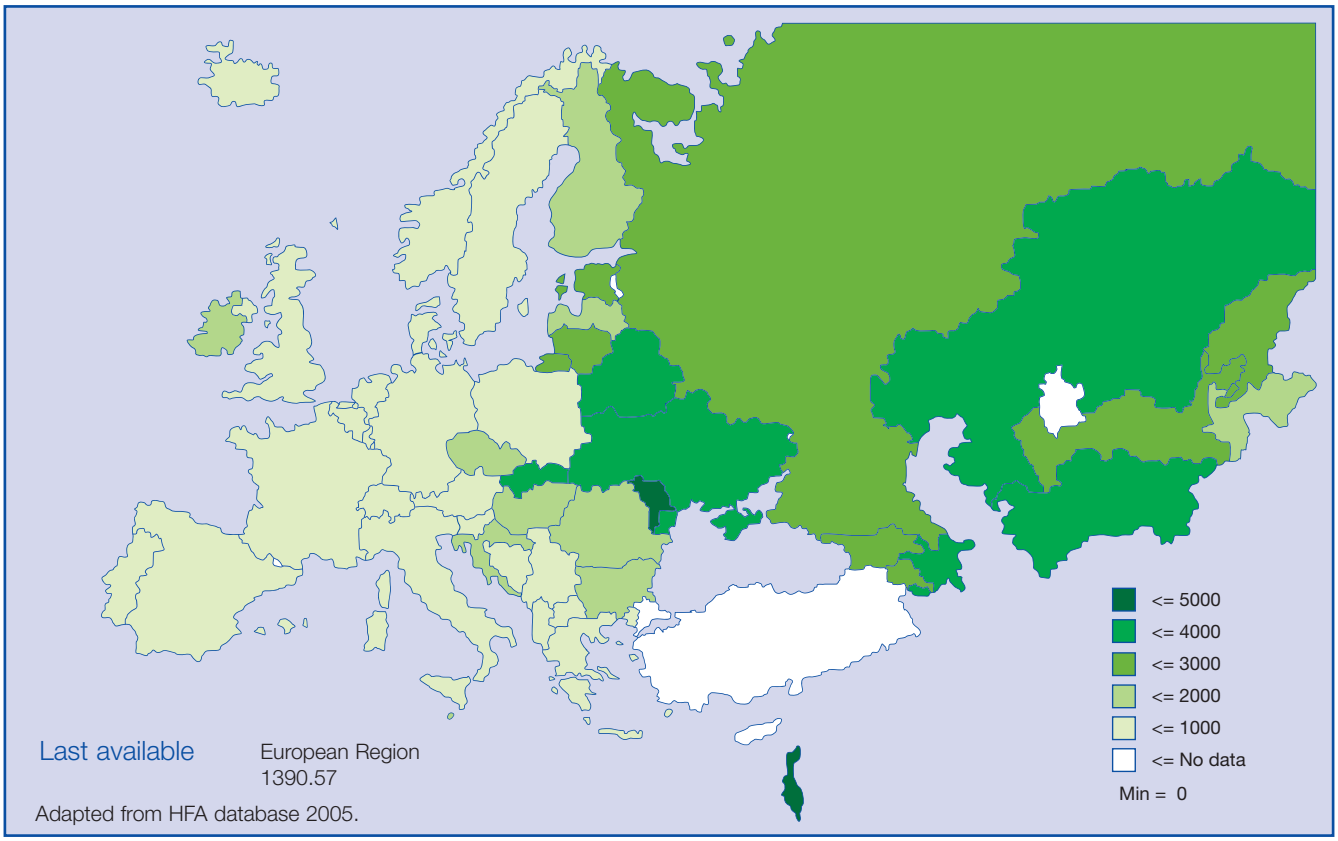
It is a fallacy that CVD only affects men. In fact, CVD kills more men but disables more women: 1 in 3 women with heart disease between the ages of 55-64 is disabled, and this rates goes up to 1 in 2 in women over the age of 75.[47]

Cancer

Cancer is the second main cause of death amongst older Europeans. Comparing prevalence data between countries may be deceiving, as higher incidence and case-fatality rates may paradoxically result in lower prevalence of cancer in certain countries or populations.[48] The reverse is true as well, with better detection and better access to care as well as better survival boosting prevalence rates. As a case in point, Sweden has amongst the highest prevalence rates of cancer in Europe, whereas Estonia has the lowest.[49, 50]

Breast cancer is the most prevalent malignancy in women. Amongst men, prostate cancer is the leading malignancy in many of the EU-15 countries, but cancer prevalence remains high in many CEE and Baltic countries. Lung cancer mortality rates vary significantly by educational level, which in turn often reflects smoking rates.[51]

Fig. 7: Standardised Death Rate (SDR) 65+ Ischaemic heart disease, per 100,000.



The Europreval study, based on data from 10 EU countries, suggests that cancer patterns follow an East-West divide. Colorectal cancer, breast cancer, melanoma and leukemia tend to be higher in Western Europe, whereas cancer of the lung, stomach and cervix take precedence in the East, with a lower incidence of prostate, breast and rectal cancer.[52]

Fig. 8: SDR 65+ females, malignant neoplasm of breast, per 100,000.

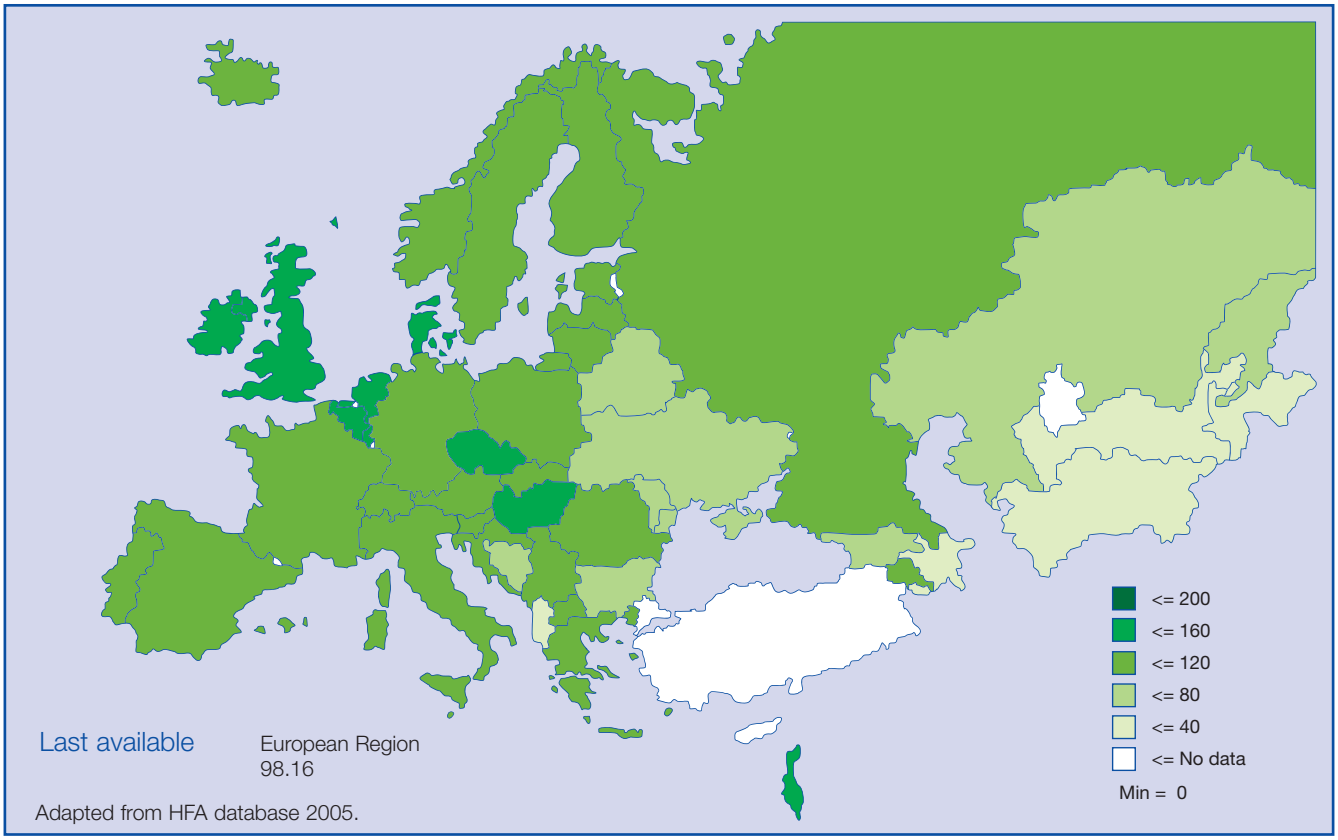
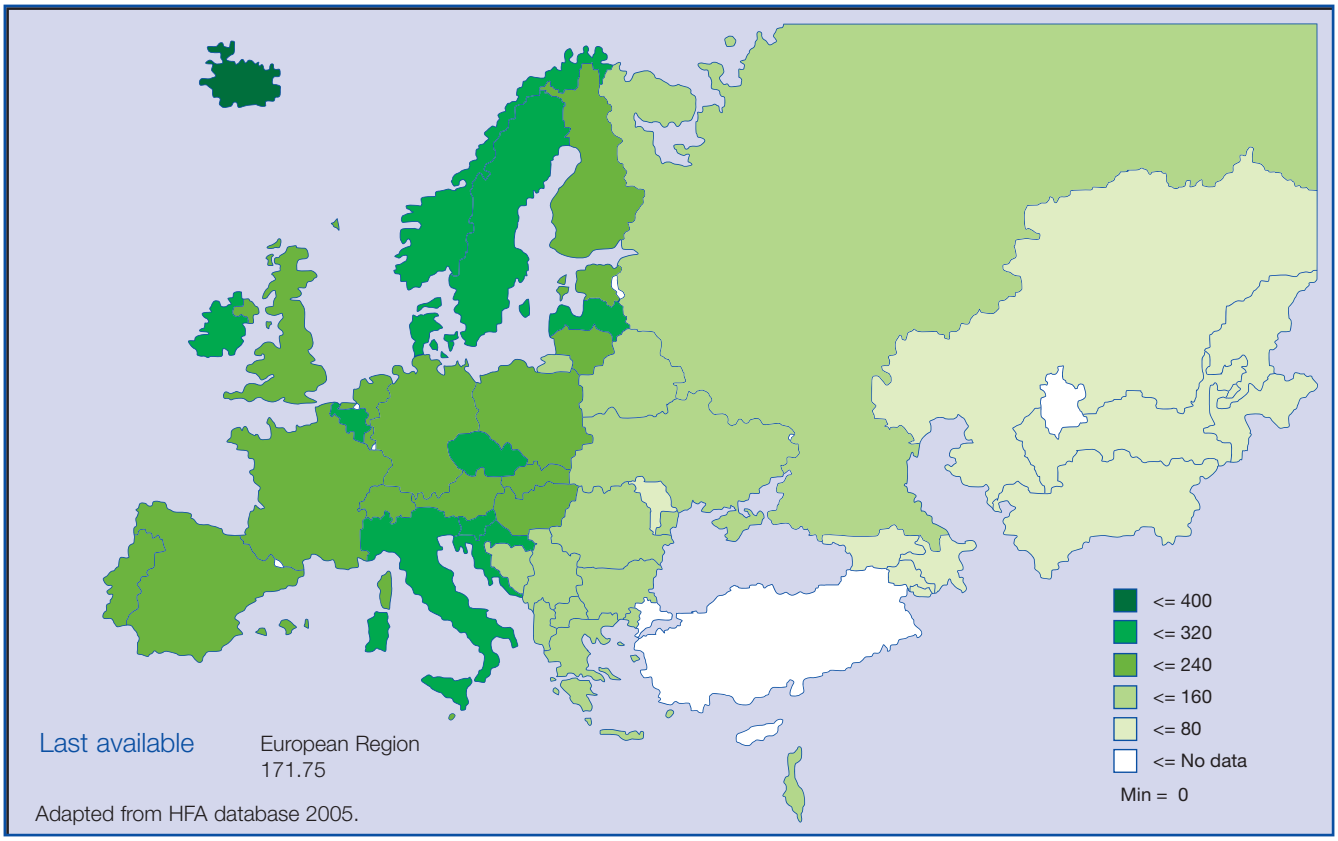


Fig. 9: SDR 65+ males, malignant neoplasm of prostate, per 100,000.



A call to action

Data on disease patterns amongst older Europeans are mostly descriptive. Few comparative data exist that help explain the reasons behind regional differences. Further studies are needed both within countries and across country settings to try to understand the risk factors and causes for patterns of disease observed in the older population. An example of such a study is the EldCare study, which looks at the impact of health system characteristics and overall levels of health expenditure on cancer survival rates across different European countries.[53]

Mental health

Mental ill-health has only recently been recognised as a major public health issue in Europe. Stigma surrounding issues of mental health has so far remained a significant hurdle to service improvement and policy reform.[54]

Depression in later life affects 10-15% of persons over 65.[55] Yet many older people may attribute depressive symptoms to physical causes, effectively contributing to underdiagnosis and under-treatment.

Only cardiovascular disease has a greater toll on morbidity and mortality than depression. *Older persons with depression are 2-3 times more likely to have 2 or more chronic illnesses; 2-6 times more likely to have one or more limitations in activities of daily living*.[56] Depressed older persons are at greater risk of premature placement into nursing homes and require more frequent and costly professional help.[57, 58]

Depression is also the major cause of suicide in European older people.[59] *Rates of suicide and self harm are approximately 26% higher in Europeans over 65 than amongst the 25-64 age groups,*[60] *and in 90% of EU countries the suicide rate is highest in those over 75*.[61]

Older women and persons of lower socio-economic status are particularly affected by depression. The EURODEP study found a clear cut excess of depression symptoms in older women in population-based studies from 13 out of 14 European centres. This excess was particularly prevalent in Southern European countries.[62]

A call to action

Better awareness, prevention and treatment of late-life depression

Mental health has received considerable attention at the EU policy level in recent years, with the EU Inter-Ministerial Conference on Mental Health in Helsinki in January 2005 and a Green Paper on Mental Health currently under consultation. Yet little reference is made to the particular issue of depression in older people in these policy documents. Policy guidelines and efforts are needed to ensure that *appropriate medical training, societal awareness and treatment options* are available across the communities of Europe to prevent, diagnose and treat late-life depression as effectively as possible. The *higher risk of depression in older women* deserves particular attention.

Targeted interventions are needed to reduce the risks of depression in older people, particularly loss of social networks and social isolation. *Further research* is also needed. Different factors may affect the onset and development of depression in later life than in earlier years. Particular attention should be given to help *identify factors that may contribute to alleviating the risks* for late-life depression. Given the impact of depression on overall health status, these actions may have positive effects on overall morbidity and mortality of older persons.

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Footnotes in text

26 HFA 2005
27 Newey, Nolte, McKee et al, 2004
28 Eurostat, 2002(a)
29 Data for EU-10 unavailable
30 Lahelma, Martikainen, Rahkonen et al, 1999
31 White, Cash 2003 (EMHF)
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35 Velkova A, Wolleswinkel-van den Bosch JH, Mackenbach JP, 1997
36 Newey, Nolte, McKee et al, 2004
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38 Levi et al, 2004
39 Newey, Nolte, McKee et al 2004
40 EUROWHO 2002
41 Newey, Nolte, McKee et al, 2004
42 EUROWHO 2002
43 ibid
44 Cardiovascular disease (CVD) includes diseases of the heart and circulatory system, mostly stroke (Petersen S, Peto V, Rayner M et al, 2005)
45 EUROWHO 2002
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48 SHARE, 2005
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50 Möller T, Anderson H, Aareleid T, et al, 2003 (EUROPREVAL)
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52 Möller T, Anderson H, Aareleid T, et al, 2003 (EUROPREVAL)
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55 Beekman et al, 1999
56 SHARE 2005
57 Federal Institute for Occupational Safety and Health, 2004
58 Katon WJ, et al, 2003
59 European Commission 2004
60 HFA Database 2005
61 European Commission 2004
62 Prince et al, 1999

4 How healthy are the years gained?

As we live longer, the challenge is to ensure that we maintain good health in our later years. This brings us to the notion of healthy ageing, described as *'the ideal situation in which people survive to an advanced age with their vigour and functional independence maintained, and morbidity and disability compressed into a relatively short period before death'.*[63]

Indicators of healthy ageing

There is encouraging evidence that disability levels are decreasing as the population gets older.[64] Yet measuring disability and quality of life in older persons is not without its methodological challenges. Different scales and measures are used across Europe.[65, 66, 67]

The two main types of measures are self-reported or 'subjective' measures (described in ***4.1-4.3***) and objective measures of functioning, such as grip strength and walking speed (described in ***4.4.***).

Interpreting country differences

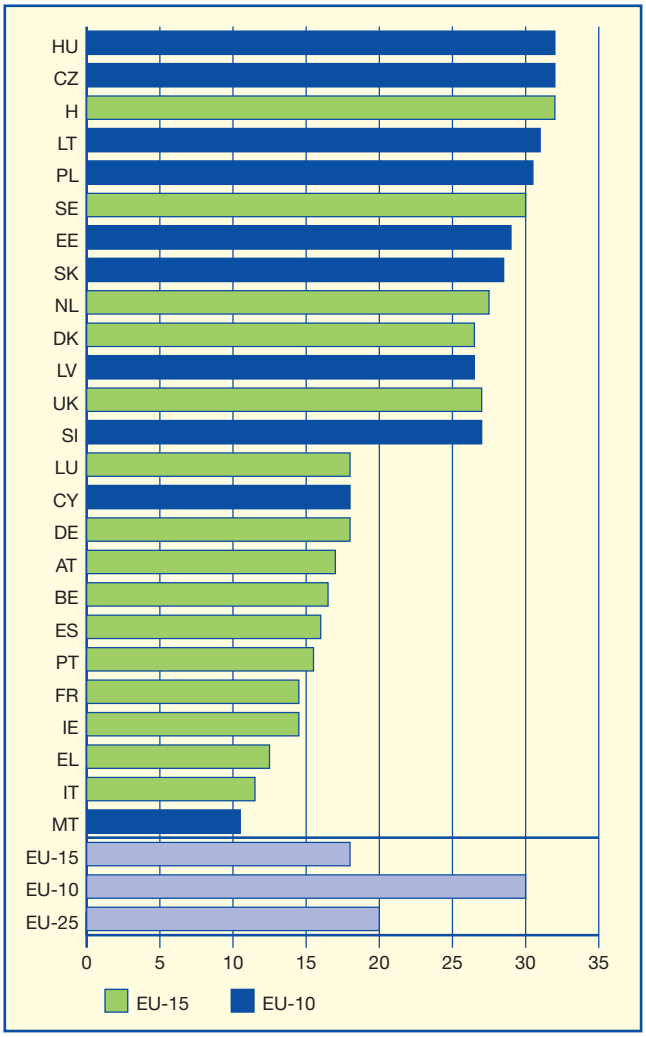
It is important to interpret differences in self-reported measures between countries with caution. The way individuals rate their health or disability is very dependent on individual and cultural ways of coping with illness. Also, the social labelling of illness and disability will affect ratings.[68]

For example, in all countries of Central and Eastern Europe, families only receive social assistance if they have at least one family member with a chronic illness. Also, disability benefits are an important source of income for older persons, as early retirement is still very common. Therefore there may be some incentives to reporting chronic illness in the family. It is thus impossible to know whether self-reported data on disability and impairment is reflective of respondents' inability to work or if it reflects actual difficulties with activities of daily living.

4.1 Self-reported health status

The number of people reporting long-term illness of disability shows the usual variation across the EU. Older Maltese persons report the lowest rates of disability, with older Fins, Latvians, Hungarians, Poles and Czechs reporting rates of over 30%.

Fig. 10: Percentage reporting long-term illness or disability.



4.2 Disability-free or health-adjusted life expectancy

Life expectancy measures may tell us how long an individual may expect to live, however they give no indication of the quality of life associated with extra years of life. Thus a number of measures have been developed that combine the impact of mortality with self-reported health status. The main ones are *Disability-free life expectancy* (DFLE) and *Health-adjusted life expectancy* (HALE). HALE adjusts life expectancy at birth for *time spent in poor health*, i.e. the equivalent number of years in full health that a person can expect to live based on current rates of ill-health and mortality.

Data on disability-free life expectancy at birth are shown below for all EU-25 countries. Patterns are similar to those for overall LE. An alternative measure is the *Life Expectancy in Good Health* (LEGH) rating, used in the AGIR study of EU-15 countries. On the basis of these figures, at 65 the average Irishman may expect to live 10.21 years in good health (63% of his remaining life), where a Portuguese man may expect to live 1.11 years in good health (12.4% of their remaining life). A similar magnitude of differences was found in women.[69]

Fig. 11: Disability-free life expectancy at birth (last available year).

	Total	Men	Women
Sweden	73.3	71.9	74.8
Italy	72.7	70.7	74.7
Spain	72.6	69.9	75.3
France	72.0	69.3	74.7
Germany	71.8	69.6	74.0
Luxembourg	71.5	69.3	73.7
Austria	71.4	69.3	73.5
Netherlands	71.2	69.7	72.6
Belgium	71.1	68.9	73.3
Finland	71.1	68.7	73.5
Greece	71.0	69.1	72.9
Malta	71.0	69.7	72.3
United Kingdom	70.6	69.1	72.1
Denmark	69.8	68.6	71.1
Ireland	69.8	68.1	71.5
Slovenia	69.5	66.6	72.3
Portugal	69.2	66.7	71.7
Cz. Republic	68.4	65.9	70.9
Cyprus	67.6	66.7	68.5
Slovakia	66.2	63.0	69.4
Poland	65.8	63.1	68.5
Hungary	64.9	61.5	68.2
Estonia	64.1	59.2	69.0
Lithuania	63.3	58.9	67.7
Latvia	62.8	58.0	67.5

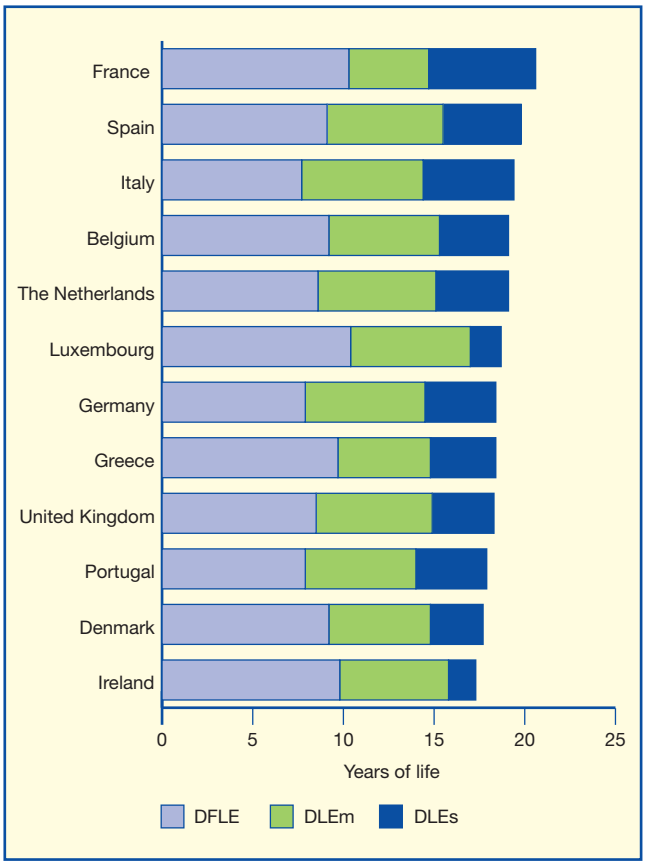
Source: HFA database 2002.

4.3 Disability-free life expectancy at 65

Disability-free life expectancy at 65 provides an insight into the impact of disability specifically after the age of 65. The AGIR study described above looked at disability-free life expectancy at age 65 across EU-15 countries.

Data are presented below for women. According to these data, French women after 65 may expect to live 10 years free of disability, 4 years with moderate disability and 6 years with severe disability. By contrast, Irish older women may live 10 years free of disability, 6 years with moderate disability and 2 years with severe disability. Though absolute differences may be subject to interpretation, they do suggest that *older people across Europe may enjoy very different levels of quality of life as they age*. Further research is needed to understand the causes behind these patterns.

Fig. 12: Female Life Expectancy at age 65 free of Disability (DFLE), with Moderate Disability (DLEm) and with Severe Disability (DLEs), European Union, 1994.



 Source: Ahn N, Genova R, Herce J et al. 2004 (AGIR).

4.4 Limitations in daily activities

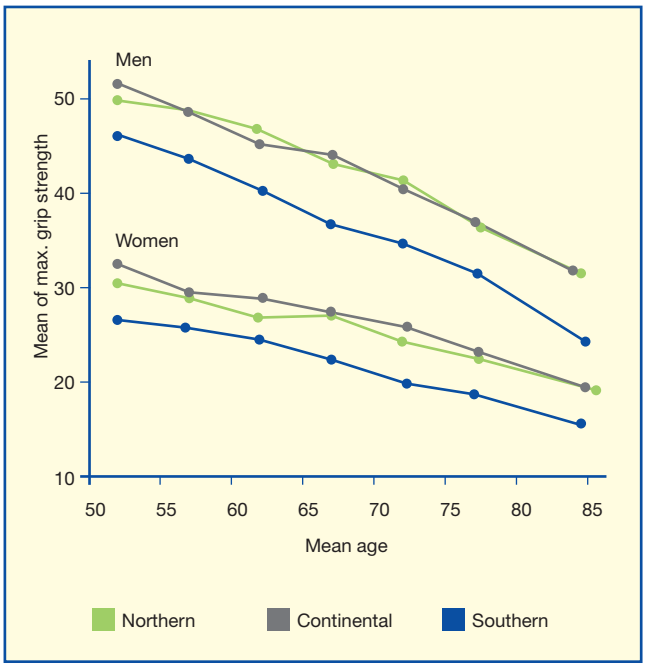
Overall disability levels have been decreasing amongst older Europeans. Yet limitations in daily activities remain significant. *On average, 18% of people 65-74, 28% of people 75-84 and 39% of people 85 and older have severe difficulties in carrying out their activities of daily living* (EU-15 data). When surveyed, nearly 17% of those aged 65-74, 23% of those aged 75-84 and 27% of those older than 85 report having had to cut down their activities in the past 2 weeks due to a health problem.[70]

4.5 Objective measures of physical functioning

To overcome the cultural biases inherent in self-reported measures of disability, 'objective' measures of functional ability have been developed. Of these, *walking speed and grip strength* have been shown to be reliable measures of physical functioning in older people. *They are also independent predictors of mortality*.[71]

Both grip strength and walking speed decrease with age. Interestingly, both measures show a clear North-South gradient within the EU-15, with Southern European older adults showing higher levels of impairment.[72] This pattern runs counter to trends in overall life expectancy (Italy and Spain, particularly, have amongst the highest overall LE figures in Europe). Data were not available for EU-10 countries.

Fig. 13: Grip strength by age among men and women in Northern (DK, SE), Continental (NL, DE, AT, CH, FR), and Southern (IT, ES, GR) Europe.



Adapted from source: SHARE 2005. No confidence interval.

4.6 Lifestyle behaviours

What lifestyle factors contribute towards healthy ageing?

Four main factors stand out as not only allowing people to live longer, but to enjoy better health in older age: a healthy diet, non-smoking, physical exercise and moderate alcohol use. Each of these factors is associated with lower all-cause mortality and lower specific mortality due to cancer and cardiovascular disease in older people.[73]

Fig. 14: Conceptual model of healthy ageing, SENECA study.

Source: Haveman-Nies A, De Groot L, Van Staveren W. 2003 (SENECA).

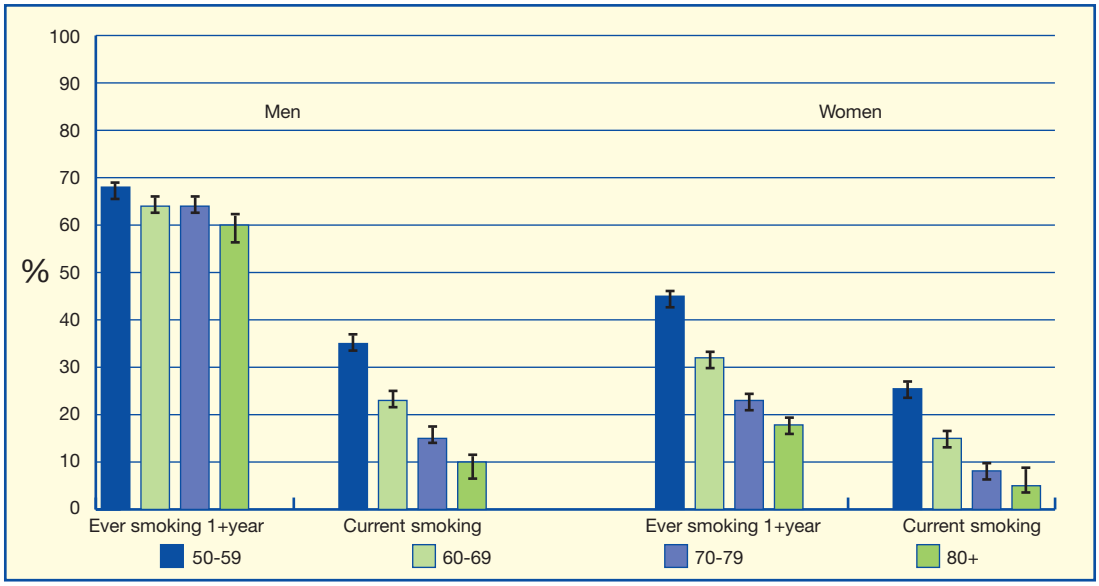
Smoking

Smoking rates have a dramatic impact on life expectancy at birth. In Poland for example, about one third of increases in life expectancy at birth in the late 1990s (4 years in men and 3 years in women) are thought to be due to the reduced incidence of smoking.[74]

Tobacco smoking is the single most important risk factor of lung cancer. Different rates of smoking over time have a lagged effect on lung cancer prevalence across the EU, which is decreasing in most countries but at very different rates.

Smoking decreases with age for both men and women. Selective mortality (ie. the fact that former smokers have 'died off') may explain part of this decline.[75] *Older men smoke more than older women*. One in 4 men over 65 reported smoking compared to 1 in 10 older women (EU-15 data only). Denmark stands out as having very high smoking rates among both older men (40%) and women (34%).[76]

Fig 15: Current and past smoking behaviour by age group and gender, >50s in 10 European countries.



Adapted from SHARE 2005.

Physical activity

Increasing physical activity in older persons is not only an effective intervention for better health, it is a cost-effective one.[77, 78] Yet only a third of persons aged 65+ perform moderate exercise at least twice a week – with huge regional differences.[79] *Older European men are more likely to exercise than older women.*[80] *The SHARE study estimated that 9% of older men and 15% of older women were physically inactive*.

Fig. 16: Mean number of days reported in the last 7 days with vigorous physical activities by age groups.

Nutrition

Older people report a greater awareness of the importance of healthy diets than younger Europeans.[81] Yet obesity is a problem for older adults as well as for younger ones. It affects older men more than older women, leading to a greater risk of diabetes and cardiovascular disease.[82]

At a population level, the unprecedented rise in obesity, coupled with poor nutrition, stress and environmental pollutants may mean that, for the first time ever, future generations may live shorter lives than current ones.[83] *Obesity and risks of poor nutrition need to be looked at longitudinally, as risks accumulate over the lifecourse of individuals*.

Malnutrition

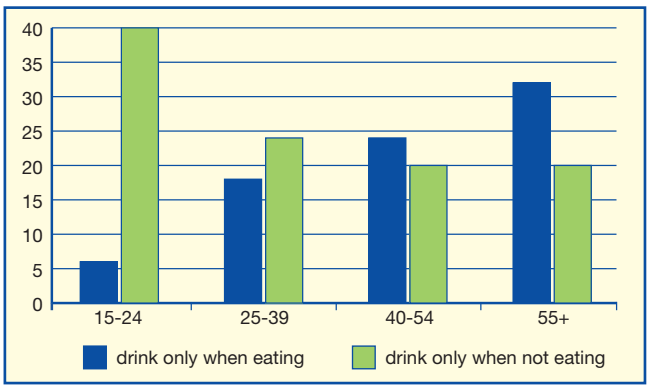
An often neglected facet to nutrition is *malnutrition*. Metabolic and physiological changes associated with the ageing process also render older people more susceptible to mineral and nutrient deficiencies, for example Vitamin D.[84] Older people tend to both eat less and have a physiological decrease in intake of food, leading to what is referred to as the *anorexia of ageing*.[85]

Malnutrition in older people is prevalent across all clinical and community settings. Up to 10% of nursing home residents lose 10% of their body weight within 6 months of admission to a nursing home.[86] *Patients over 80 admitted to hospital have a 5 times higher prevalence of malnutrition than those under 50*.[87] In a UK study, 14% of older persons aged over 65 living in the community has malnourishment secondary to another condition.[88]

Alcohol

Data on alcohol intake are difficult to interpret as cultural norms and definitions of drinking vary significantly between countries and will have a clear impact on self-reported data.

Fig. 17: Correspondence of age with drinking patterns, EU-15. (2002).



28% of men over 65 report regular intake compared to 10% of women (EU-15 data).[89] The SHARE study reported alcohol intake in later age groups was highest in the 60-69 age range, after which it declined.[90] Other data has suggested that alcohol intake is highest in those aged 45-55 and then declines. Rates across the EU-15 vary from 6% of older people reporting regular alcohol consumption in Spain to 41% in Denmark.[91]

High alcohol consumption is linked to increased mortality mostly via liver cirrhosis. It is a huge cause of premature mortality in the Baltic and CEE countries. Excessive drinking is an important issue in Northern European countries in general, where rates have considerably increased in recent years for both men and women.[92]

Severe alcohol consumption is also both a catalyst for and a consequence of depression, exacerbating its effects on disability and well-being.

A call to action

Health promotion is for older people too

There has been a growing emphasis on the role of public health and health promotion across Europe over the past few years. *But most health promotion campaigns tend to focus on improving modifiable risk factors and changing behaviours in younger generations*. With evidence consistently showing the importance of smoking, drinking, eating and exercise habits well into later age, there is a need *to ensure that the right public health messages are being given to all generations*. Studies demonstrating the value and cost-effectiveness of targeted interventions in older people are urgently needed to orient policy. The work on physical activity in older people is a particularly helpful example.[93]

Moreover, a 'one size fits all' approach to health promotion and education campaigns may not be suitable. Individuals' willingness and capacity to obtain, process, and understand health promotion information in order to make appropriate health decisions may evolve over their lifecourse.[94] Further research and efforts are needed to assess *how effective existing campaigns and programmes may be to foster healthy behaviours in different groups of people as they age*.

Current health promotion messages need to be adapted to the needs of different age groups as well as different cultural and social factors.

Need for better measures of health status and morbidity in older persons

The contribution of large, multi-national European datasets such as SHARE (Survey for Health, Ageing and Retirement in Europe) to our understanding of what affects the lives and health of older Europeans is significant. *Better indicators are needed, however, to allow us to measure not only health status but quality of life and functional abilities of individuals as they age*. Too often, data on older people are lumped together in a single group – 'aged 65 and over'. There is a need for *data to be available by age group*, to allow for a better understanding of risk factors and health outcomes across all segments of the older population. More research into the causes of observed disability patterns are also needed.

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5 Special focus: dementia

5.1 Clinical definition

Dementia can be defined as 'the loss of intellectual functions of sufficient severity to interfere with a person's daily functioning.'[95] Dementia is not a disease in itself but rather a group of symptoms that may accompany certain diseases or conditions. Alzheimers' disease (AD) accounts for over half of all dementia cases. The next most common cause is vascular dementia.

The symptoms of dementia normally involve a gradual and slow deterioration of the person's ability to function. Brain damage affects mental functioning (memory, attention, concentration, language, thinking, etc.) and this in turn has repercussions on behaviour.[96]

There is no definite cure for dementia, nor is there a standard course of development. Most people die of complications such as pneumonia rather than of dementia itself.[97]

5.2 Prevalence

Alzheimer's disease has been called the 'plague of the 21st century'.[98] There are currently 5.5 million people with dementia in Europe. AD affects 4% of people over the age of 65 and this figure is set to double within 50 years.[99] Prevalence rises from around 2% amongst 65-69 year olds to 22% amongst 85-89 year olds.[100] The number of people with cognitive impairment is expected to rise by over 60% over the next 30 years. *There are more new cases per year – more than stroke, diabetes or breast cancer*. Some 32% of people in nursing care are there because of dementia.[101]

5.3 High awareness but little understanding

The *Facing Dementia Survey* looked at perceptions of the general public, caregivers and persons with dementia across France, Germany, Italy, Poland, Spain and the United Kingdom. The survey found that the general public was very aware of how devastating Alzheimer's disease could be, however they had little knowledge of early symptoms. Only 15% of respondents realised that children or siblings of a person with AD is three to four times more likely to develop the disease over their lifetime than someone with no affected relative.

Relatives may delay seeking diagnosis because of lack of awareness that the symptoms are AD (70%) or that they are serious (61%), or they *simply dismiss symptoms as part of 'normal ageing* (68%). Denial remains an important hurdle and is thought to account for over 60% of delays in diagnosis.

5.4 The importance of prevention

A small percentage of cases of dementia are treatable or potentially reversible, such as those caused by drugs or vitamin imbalances.

More generally, there is growing recognition of the importance of preventable risk factors of dementia. Epidemiological evidence has been accumulating that hypertension, hypercholesterolemia and obesity are potential modifiable risk factors of AD.[102] Physical and social activity, a healthy diet, minimising exposure to toxins (such as lead and mercury), not smoking or abusing alcohol may all help minimise the risk of cognitive decline.[103, 104]

5.5 The need for timely diagnosis

Early diagnosis may play a huge role in delaying the onset of severe dementia.[105, 106] Timely diagnosis is essential to allow families to adapt to the condition and its impact, prevent crises and facilitate access to suitable treatment and care options. It takes on average 30-47 months from the presentation of initial symptoms to confirmed diagnosis of AD.[107]

5.6 Insufficient clinical training

A Polish survey estimated that only 10% of practicing GPs were able to recognise the symptoms of dementia.[108] Caregivers, interviewed in the *Facing Dementia Survey*, expressed doubt about the ability of primary care physicians to recognise early symptoms of AD.[109] 70% of primary care physicians and 35% of specialists surveyed acknowledged that they found it difficult to detect early signs of disease.[110]

5.7 Limited treatment options

Treatment options for Alzheimer's disease are scarce, however drugs such as cholinesterase inhibitors, cognitive therapy and counselling have been shown to improve persons' quality of life and reduce the impact of symptoms. *Access to treatment varies significantly by country*. In the Facing Dementia Survey, for example, 51% of caregivers were offered treatment (medicinal or other) for their relatives, as compared to 83% in France, 78% in Germany, over 85% in Italy, Poland and Spain. Cognitive therapies, psycho-stimulation, support groups, counselling and day care are too infrequently recommended by treating physicians.

Most physicians speak of a 'critical treatment window' during which real changes may be made for the patient's benefit. However, the medical profession is not united in this view, with significantly fewer UK physicians accepting that delaying treatment may be harmful.[111] *Too many physicians still adopt a somewhat nihilistic attitude towards treating AD.*[112] *Many physicians consider medicines for AD as 'too expensive' and limitations on access to AD drugs are present in many European countries*.

5.8 Main obstacles to good diagnosis and treatment for AD

The findings of the *Facing Dementia Survey* led to the following list of obstacles to good diagnosis and treatment for AD across Europe:

- lack of awareness of early stages of the disease within the general public and general practice physicians
- lack of a simple diagnostic test
- budget priorities and cost of drugs
- lack of political attention, inadequate resources
- lack of research funding
- low profile and unpopularity of geriatrics
- lack of facilities and specialist treatment centres

(Adapted from Rimmer et al, 2005b)

5.9 The critical role of caregivers

Caring for a relative with AD has been described as 'life changing, exhausting and stressful'.[113] The distress for relatives seeing their loved ones progressively succumb to AD, particularly as memory loss sets in, can be devastating. Nearly two-thirds of caregivers interviewed may have to change their living arrangements to care. They become, in the words of an Alzheimer's patient, 'enslaved' to their relatives' illness and become themselves at increased risk of poor health, social isolation and depression.

5.10 Stigma and fear of disease

Alzheimer's disease 'breeds fear' and shame. *Stigma is often felt by caregivers and sufferers alike*. Stigma by professionals is also a huge factor contributing to late or insufficient diagnosis of AD, with particular cultural contexts playing a role as well.[114] The presence of Alzheimer's disease support societies may significantly help reduce the stigma associated with the disease.[115]

5.11 A considerable financial burden

Much of the financial burden for caring for AD patients rests on the shoulders of family members. Lack of home care and residential care services as well as a general reluctance across Europe to 'institutionalise' older relatives means that informal care is often the main source of care for persons with AD. The financial strain on families can be considerable. Even when community services do exist, *they are often not covered by state health insurance and thus remain the full financial responsibility of individuals and their families*. In France for example, a strategic plan for the management of Alzheimer's disease ('Plan Alzheimer') was introduced in 2004, making all drugs for Alzheimer's disease fully covered by Social Security. These drugs typically cost between €50-100 per month. By contrast, home care may cost up to €1524 for 8 hours of care per day or €4573 per month for 24-hour care.

A call to action

Make dementia a central government responsibility

Governments have a key role to play in raising awareness and improving outcomes for sufferers of dementia. Caregivers, AD patients and professionals alike voice the concern that policy makers in their countries are not overly concerned with AD. As was expressed by the authors of the Facing Dementia Survey:

'The physical and financial burden of AD is alleviated in countries where government supports well-developed care systems for people with dementia, the costs of medical therapy are reimbursed, health care workers have been well trained and public awareness of the disease is higher'.[116]

The first step is to *challenge and remove the stigma associated with AD*. People with dementia still feel stigmatised, caregivers feel isolated and physicians feel uncomfortable discussing the illness with older persons and their families. *The media has an important role* to play in familiarising the public about the disease. Personalising the disease may help engage the public. Joint efforts are needed to encourage early recognition of symptoms, effective use of treatment and decrease stigmatisation.

The second step is to *recognise the importance of prevention and early detection*.

The third step is to invest *sufficient resources to relieve the burden of AD*. The WHO and the European Council have urged national governments to invest resources in mental health, yet mental health remains low on national health budget priority lists.[117] Budget projects need to take into account *the magnitude of the costs borne by families*.

Finally, better treatment options are needed. One important avenue is *investing in research*. In the UK for example, current expenditure for AD stands at 10% of what is spent on cardiovascular disease and a mere 3% of what is spent on cancer.[118] Charitable donations to Alzheimer's disease are much less 'fashionable' than donations to other causes. Lack of investment in research is symptomatic of the societal view that dementia is an inevitable facet of old age and that nothing can be done to prevent it, and that treatments that provide symptomatic relief to older people without prolonging life are not deemed cost-effective. *These attitudes are blatantly ageist and need to be reversed* to offer persons with AD better options for treatment and enhance their quality of life despite their condition.

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118 Wilkinson et al, 2005

6 Conclusion

By 2050, one third of Europe's population will be over 60. This will have significant implications for the state of health of Europeans and pose distinct challenges to health and social care systems.

The time is ripe to start addressing these challenges. Growing evidence has shown that actions targeted at modifying lifestyle behaviours, for example stress, obesity and tobacco use, are useful over the entire lifecourse, not just in younger generations.

If implemented from midlife onwards, these actions may prevent and postpone the onset of morbidity caused by such conditions as cardiovascular disease, stroke, cerebrovascular disease, and communicable diseases in older people.

Coupled with more sustainable, community-orientated models of care, better evidence on the health status and preferences of older people, and more attention given to issues such as later-life depression and dementia, these actions may help ensure that active ageing is a reality for future generations of Europeans.

7 Appendix: Resources

Please note all weblinks are accurate at the time of press. However the authors are not responsible for external websites and give notice that links may cease to function after publication.

European Commission:
http://epp.eurostat.cec.eu.int/

Eurostat:
The primary repository of collated EU-level socio-economic and demographic data:
http://epp.eurostat.cec.eu.int/

- Statistical Yearbook 2004: the statistical guide to Europe.
- Population statistics: Theme 3, population and social conditions (2004)
- Health statistics – Atlas on mortality in the European Union (EU-15, 2002)

Eurobarometer:
The principle body collecting data on public opinion in the EU-25
http://europa.eu.int/comm/public_opinion/index_en.htm

US Census Bureau and International Data Base:
http://www.census.gov

Organistion for Economic Cooperation and Development (OECD):
www.oecd.org

World Health Organisation Regional Office for Europe (EURO WHO):
http://www.euro.who.int/

- The European Health for All Database *http://www.euro.who.int/hfadb*
- The European Health for All Mortality Database *http://www.euro.who.int/hfadb*
- European Health Report 2002: *http://www.euro.who.int/europeanhealthreport*

United Nations

- The UN World Population Prospect database http://esa.un.org/unpp/
- United Nations World population prospects 2004.
  http://www.un.org/esa/population/publications/WPP2004/2004Highlights_finalrevised.pdf

European Observatory on Health Systems and Policies:
http://www.euro.who.int/eprise/main/who/progs/obs/home

Alliance for Health and the Future:
http://www.healthandfuture.org/

Older Womens' Network, Europe:
http://www.own-europe.org/

Major European Studies on Ageing:

- Ageing, health and retirement in Europe (AGIR) http://www.enepri.org/Agir.htm
- The Comparison of Longitudinal European Studies on Aging study (CLESA) http://www.clesaproject.org/
- The Finland, Italy, Netherlands, Elderly Study (FINE)
- Healthy Ageing: a Longitudinal study in Europe (HALE)
- The Survey of Health, Ageing and Retirement in Europe (SHARE) http://www.share-project.org/
- European Community Household Panel (ECHP) *http://forum.europa.eu.int/irc/dsis/echpanel/info/data/information.html*

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