The health of older people

Summary of key findings

A survey carried out on behalf of The Information Centre

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Joint Health Surveys Unit

National Centre for Social Research

Department of Epidemiology and Public Health at the Royal Free and University College Medical School
Health Survey for England 2005
The health of older people
Summary of key findings

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Introduction

The Health Survey for England (HSE) is part of a programme of surveys commissioned by the Information Centre for health and social care, and carried out since 1994 by the Joint Health Surveys Unit of the National Centre for Social Research (NatCen) and the Department of Epidemiology and Public Health at the Royal Free and University College Medical School (UCL). The study provides regular information that cannot be obtained from other sources on a range of aspects concerning the public’s health and many of the factors that affect health. The series of Health Surveys for England was designed to monitor trends in the nation’s health, to estimate the proportion of people in England who have specified health conditions, and to estimate the prevalence of certain risk factors and combinations of risk factors associated with these conditions. The survey is also used to monitor progress towards selected health targets.

Each survey in the series includes core questions and measurements (such as blood pressure and anthropometric measurements and analysis of blood, saliva and urine samples), as well as modules of questions on specific issues that vary from year to year. In recent years, the core sample has also been augmented by an additional boosted sample from a specific population subgroup, such as children, minority ethnic groups or, as this year, older people.

This is the fifteenth annual Health Survey for England. All surveys have covered the adult population aged 16 and over living in private households in England. Since 1995, the surveys have included children aged two to 15, and since 2001, infants under two years old, who live in households selected for the survey. Those living in institutions were outside the scope of the survey. This should be borne in mind when considering survey findings since the institutional population is likely to be older and, on average, less healthy than those living in private households. Like the 2000 survey, HSE 2005 focuses on the health of older people, and this report presents results for adults aged 65 and over within the general population in England.

The HSE 2005 included a general population sample of adults and children, representative of the whole population at both national and regional level, and a boost sample of older people aged 65 and over. For the general population sample, 7,200 addresses were randomly selected in 720 postcode sectors, issued over twelve months from January to December 2005. At each address, all households, and all persons in them, were eligible for inclusion in the survey. Where there were three or more children aged 0-15 in a household, two of the children were selected at random. A nurse visit was arranged for all informants who consented.

In addition to the core general population sample, a boost sample of older people was selected using 11,520 additional addresses at the same 720 postcode sectors as the core sample. Households were screened to identify whether older people were resident, and in these cases interviews and nurse visits were conducted. For some months of the year (January, February, October, November and December), this same boost sample was also used to identify households with children aged 2-15, and interviews were conducted with up to two children when such households were identified. There was no nurse follow up for this child boost sample.

Interviews were held with 7,630 adults aged 16 and over, and 1,852 children from the general population. The boost sample resulted in an additional 2,673 adults aged 65 and over, and 1,142 children aged 2-15 being interviewed. Interviews were carried out at 71% of
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- **a** These modules were administered by self completion.
- **b** This module was administered by self-completion for those aged 16-17 and some aged 18-24.
- **c** Shortened smoking module for boost sample 65+.
- **d** 18+ only (there are no HRT questions in the young adult self-completion).
- **e** This module was asked by proxy and administered by self-completion for parents of 4-15 year olds.
households in the general population sample, and at 74% of known eligible boost sample households. 89% of adults in co-operating households were interviewed in the general population sample, and 97% of older people in eligible co-operating households.

Topics covered in the 2005 Health Survey for England

Informants in the core sample and in the boost sample of older people were given an interview, followed by a visit from a specially trained nurse. The interview included questions on core topics such as general health, alcohol consumption, smoking and fruit and vegetable consumption. Older informants were also asked about use of health, dental and social care services, cardiovascular disease (CVD), chronic diseases and quality of care, disabilities and falls. Height was measured for those aged two and over and weight for all informants.

Nurses measured infant length (aged at least six weeks and under two years), blood pressure (aged 5 and over), and waist and hip circumference (aged 11 and over). Demi-span measurements (the length between the sternal notch and the end of the outstretched arm) were taken for informants aged 65 and over, and this age group was also asked to perform tests of physical function. Non-fasting blood samples were collected from informants aged 65 and over. Nurses also collected a spot urine sample from adults aged 16 and over in the core sample only, and a saliva sample for cotinine assay from children aged 4-15. Nurses obtained written consent before taking samples from adults, and parents gave written consent for their children’s samples. Consent was also obtained from adults to send results to their GPs, and from parents to send their children’s results to their GPs.

Results

This booklet presents findings for older people (aged 65 and over) from the 2005 Health Survey for England. All 2005 data in this report are weighted. Data for the general population have been weighted to allow for non-response and selection differences, and the boost sample of older people has been weighted to adjust for non-response. Both weighted and unweighted bases are given in each table. The unweighted bases show the number of informants involved. The weighted bases show the relative sizes of the various sample elements after weighting, reflecting their proportions in the English population.

The full report consists of five volumes. The first four present the main findings on the health of older people:

1. General health and function
2. Chronic diseases
3. Social capital and health
4. Mental health and wellbeing

The fifth volume, Methodology and documentation, provides details of the survey design, methodology and response.
Key findings

General health

Self-reported general health
Informants reported on their general health using a five category scale. More than half of both men and women aged 65 and over said their health was ‘good’ or ‘very good’ (57% of men and 55% of women). The prevalence of self-reported ‘good’ or ‘very good’ health decreased with age among women. Differences in self-reported general health were found between Government Office Regions in both men and women. In the West Midlands, women reported a higher prevalence of ‘good’ or ‘very good’ health than men. Prevalence of ‘good’ or ‘very good’ health was higher in non-Spearhead Primary Care Trusts (PCTs) than Spearhead PCTs. In both Spearhead and non-Spearhead PCTs, the proportion of informants reporting ‘good’ or ‘very good’ health increased with income. Spearhead PCTs have been identified as the most health-deprived areas in England based on indices of deprivation, mortality from cancer and heart disease, and life expectancy.

Longstanding illness and limiting longstanding illness
Among both men and women aged 65 and over, 71% reported longstanding illness. 42% of men and 46% of women reported that their illness limited their activities in some way. The prevalence of longstanding illness and limiting longstanding illness increased with age in both sexes. Limiting longstanding illness was higher among women than men aged 80-84 but was similar for other age groups.

The most commonly reported types of longstanding illness among both men and women aged 65 and over were musculoskeletal, and heart and circulatory diseases. In general, the rate of almost all of the conditions increased with age in both sexes. Between 2000 and 2005 there was an increase in the rate of endocrine and metabolic system conditions in both sexes.

Disabilities and incontinence
Among people aged 65 and over, 37% of men and 40% of women reported having at least one functional limitation (seeing, hearing, communication, walking, or using stairs). Prevalence of functional limitation increased with age, from 26% of men and 25% of women aged 65-69 to 57% of men and 65% of women aged 85 and over. The number of functional limitations also increased with age: prevalence of reporting three or more limitations increased from 4% of men and 2% of women aged 65-69 to 17% of men and 19% of women aged 85 and over.

More than half of men and women who reported any functional disability were unable to walk 200 yards or more without aids and without stopping or discomfort. The most frequently reported limitation among women with a functional disability was having difficulty walking up a flight of 12 stairs without resting.

Mobility problems
Fewer men (39%) than women (47%) aged 65 and over reported any difficulty with walking a quarter of a mile. Both the prevalence and severity of this mobility problem increased with age.

Those living in non-Spearhead PCTs were less likely to experience mobility problems than those in Spearhead PCTs; those in the highest two quintiles of equivalised household income were also less likely to have mobility problems.
Bladder problems

21% of men and 22% of women aged 65 and over reported that they suffered from bladder problems. Both prevalence and severity increased with age. There were no significant differences between men and women in either the prevalence or severity of bladder problems. 54% of women but 79% of men with bladder problems reported that they had consulted somebody about the problem. More women than men reported using an incontinence aid (69% compared with 28%).
Fruit and vegetable consumption

Questions on fruit and vegetable consumption were introduced into HSE in 2001. The questions focus on consumption on the day before the interview, which was assumed to be a 'typical' day. A ‘portion’ of 80g was defined in terms of everyday measures, such as tablespoons, cereal bowls and slices. The analysis focuses on mean consumption and on the proportion of informants eating the recommended amount of five or more portions per day.

On average, men aged 65 and over consumed 3.9 portions of fruit and vegetables per day and women consumed 3.8 portions. Fewer than one-third of men (31%) or women (29%) consumed the recommended five portions or more per day. Fresh fruit and vegetables were the most commonly eaten foodstuffs. Fresh fruit was eaten by 72% of men and 80% of women, and vegetables (fresh, raw, tinned and frozen) by 63% of both men and women on the previous day.

Fruit and vegetable consumption was highest in London and the South East. The proportion of men and women consuming no fruit or vegetables on the previous day varied markedly by region.

Haematological status

Anaemia occurs if haemoglobin levels in the blood are too low. The most common cause of anaemia in older people is anaemia of chronic disease, with only 10-15% due to iron deficiency anaemia. Mean haemoglobin levels decreased with age for both sexes, from 14.9g/dl in men and 13.7g/dl in women aged 65-69, to 13.7g/dl in men and 13.0g/dl in women aged 85 and over. Prevalence of anaemia increased with age, and also varied by region and by income, with highest rates of anaemia among those in the lowest income quintile.

Vitamin D status

Inadequate exposure to sunshine and low dietary intakes of vitamin D are the main reasons for vitamin D deficiency. Insufficient vitamin D in older people is commonly characterised by deformed and brittle bones, increased risk of bone fractures, muscle weakness and poorer neurological control. Vitamin D levels were higher among men (53nmol/L) than women (48nmol/L) in those aged 65 and over, and levels declined with age for both men and
The prevalence of vitamin D deficiency in those aged 65 and over was 14% of women and 8% of men. Prevalence of vitamin D deficiency increased with age among women but was similar across all ages among men.

Tests of physical performance were included in HSE 2005 to provide objective measures of physical function for adults aged 65 and over.

Hand-grip strength provided a measure of upper body strength. Lower limb mobility was measured using three assessments: walking speed, balance tests and chair rises.

**Upper body strength**

For women grip strength was about 60% of that for men. The mean hand-grip strength for each age group declined with age for both men and women, so that by the age of 85 and over it was about two-thirds of the mean grip strength of those between the ages of 65-69. However, although mean grip strength for each age group fell as age increased, there was no inevitable link in an individual between weakness and age, with many of the older informants stronger than some of the youngest. For example, the top 25% of women aged 85 and over had grip strengths stronger than the bottom 25% of women aged 65-69.

**Lower limb mobility**

14% of men and 25% of women aged 65 and over were classified as ‘walking impaired’, with a walking speed of less than 0.5 metres per second. Walking ability declined with age, so that by the age of 85 and over 36% of men and 56% of women were ‘walking impaired’.

The ability to balance declined with age for both men and women. The ‘full tandem’ balance test (in which the informant was asked to stand with the heel of one foot in front of and touching the toes of the other foot), was the most sensitive in differentiating between different age groups. 87% of men aged 65-69 could hold the position for 10 seconds, but this fell to 31% at the age of 85 and over. For women, there was a more pronounced decline, starting at an earlier age. 74% of women aged 65-69 could hold the full tandem position for 10 seconds, falling to 19% at the age of 85 and over. The ability to get out of a chair (without using their arms) also declined with age. Overall, 87% of men and 79% of women could complete a single chair rise. More men than women were able to complete the balance tests and chair rise tests. A woman’s ability to complete the tests was approximately that of a man five years older.

Lower limb mobility varied for men and women by equivalised household income. The highest income group were less likely to have lower limb impairment.
Falls are a major cause of disability and one of the biggest causes of mortality from injury in older people in the UK. 5% of falls result in fractures, with an increased risk for those with osteoporosis. The long-term implications of falling include possible physical disability, entry into long-term care, and psychological problems.

23% of men and 29% of women aged 65 and over had fallen in the last 12 months. As expected, the proportion of people who had fallen increased with age. Within each age group a higher proportion of women had fallen compared with men, apart from those aged 85 and over.

23% of men and 34% of women who had fallen in the past year reported that they required medical treatment. The proportion of women requiring medical treatment increased with age from 29% of those aged 65-69 to 42% for those aged 85 and over. In contrast, the proportion of men requiring medical treatment did not vary significantly by age.

Risk factors associated with falling were identified as age, limiting longstanding illness, general health questionnaire (GHQ12) score measuring psychosocial wellbeing, impaired lower limb function, disease of the nervous system, stroke and depression. While most of these risk factors were significant for men and women, exceptions were stroke (only significant for men) and emotional, nervous or psychiatric conditions (only significant for women).
**Cardiovascular disease**

Cardiovascular disease (CVD) remains the main cause of death in England, although death rates are falling. The government has set a target to reduce the death rate from coronary heart disease and stroke amongst people aged under 75 by at least two fifths by the year 2010.

For the purpose of this report, informants were classified as having a CVD condition if they reported having ever had any of the following conditions diagnosed by a doctor: angina, heart attack, stroke, heart murmur, irregular heart rhythm, ‘other heart trouble’.

CVD was the most common chronic disease reported by men aged 65 and over. Prevalence of any CVD increased with age and was higher among men (37%) than women (31%). Prevalence of CVD in women was lower than in men in the ‘young old’ but then increased more rapidly, to reach the same levels amongst those aged 85 and over, with 43% of men and 45% of women in this age group reporting CVD.

![Prevalence of CVD, by age and sex](chart)

Prevalence of cardiovascular disease varied significantly across regions in both sexes. Among men it was highest in the North East and lowest in the East of England. Among women, the prevalence was highest in the North East and West Midlands and lowest in London.

Informants were classified as having ischaemic heart disease (IHD) if they reported ever having angina or a heart attack, confirmed by a doctor. 28% of men and 20% of women reported having had IHD or a stroke. 23% of men and 16% of women reported IHD; 9% of men and 7% of women had had a stroke. The prevalence of IHD was higher in Spearhead PCTs than non-Spearhead PCTs.

**Diabetes**

Diabetes is characterised by high blood glucose levels (hyperglycaemia), and may be associated with damage and possible failure of many organs, especially the eyes, kidneys, nerves, heart, and blood vessels. Diabetes is not only a risk factor for CVD but also tends to worsen the effects of other risk factors for CVD, such as raised cholesterol and other blood fats, hypertension, smoking, and obesity.

13% of men and 10% of women aged 65 and over reported having diabetes. Prevalence of diabetes was inversely related to income in both sexes.

**Arthritis**

Arthritis covers a group of different diseases that affect joints. Symptoms include pain, particularly with use, and short-lived stiffness after inactivity. Limitation of movement results in difficulty or inability to carry out ordinary activities, such as climbing stairs or getting dressed.
Arthritis was the most prevalent chronic disease overall among adults aged 65 and over, especially among women. It was reported by 32% of men and 47% of women. 2% of men and 12% of women reported having osteoporosis and 9% of men and 12% of women had had a joint replaced. The prevalence of these diseases also increased with age.

**Emotional, nervous and psychiatric problems**

Mental illness in old age is very common; epidemiological and clinical studies have shown that it is mostly unrecognised by the individual and the doctor, and even when recognised often does not receive adequate or appropriate management.

4% of men and 7% of women aged 65 and over reported having any emotional, nervous or psychiatric problems. The prevalence of emotional, nervous or psychiatric problems varied significantly by region, for both sexes. In men, the proportion reporting these problems was highest in the North West and East Midlands and lowest in the West Midlands. Among women, it was highest in the East Midlands and lowest in London.

**Other chronic diseases**

10% of men and 12% of women reported asthma; 9% of men and 7% of women reported chronic lung disease; again, reported prevalence increased with age. Similar proportions of informants reported cancer or malignant tumour (10% of men and 9% of women). 1% of informants reported Parkinson’s disease.

Obesity and underweight are important public health burdens among older people due to their association with poor health and well-being. Obesity can lead to premature death due to its association with chronic diseases such as cardiovascular disease, diabetes, hypertension and stroke, and certain forms of cancer.

HSE 2005 reports on height, weight, body mass index (BMI), the prevalence of overweight/obesity and waist circumference to assess central obesity in older people aged 65 and over. BMI, a measure of generalised obesity, is weight (kg) divided by the square of height (m²). Informants were classified into the following BMI groups according to current medical definitions for adults of all ages:

- Over 18.5 kg/m² = desirable weight
- Over 25 kg/m² = overweight
- Over 30 kg/m² = obese
- Over 40 kg/m² = morbidly obese
Mean body mass index (BMI) was approximately the same in men (27.5 kg/m²) and in women (27.7 kg/m²) aged 65 and over. In both sexes it declined with age. 72% of men and 68% of women were either overweight or obese. A greater proportion of men than women were overweight (47% compared with 39%) but a greater proportion of women than men were obese (28% and 24% respectively).

There was a greater difference between the proportion of women and men who were overweight or obese in the older age groups than in the younger age groups. The proportion who were morbidly obese was highest among women aged 65-69 (3%).

The prevalence of overweight including obesity was higher among men in the East Midlands and South West than in the North West. Among women, those living in the West Midlands and in Yorkshire and the Humber were the most likely to be overweight including obese and those living in the South East were the least likely. The prevalence of obesity among men was greatest among those living in the East and West Midlands and lowest in the North East. Among women there were no significant regional variations in obesity.

Ageing influences the distribution of adipose tissue. Because fat replaces fat-free mass with increasing age, older people may have a greater proportion of fat than younger individuals with the same BMI. The change in distribution of fat with age results in an increase in abdominal fat in relation to total body fat. Thus older people are more likely to have a raised waist circumference, a risk factor for metabolic syndrome and other adverse health outcomes. Raised waist circumference (defined as 102cm in men, 88cm in women) was more prevalent in women than in men (58% and 46% respectively).

Certain chronic diseases, namely diabetes, arthritis, and having had a joint replaced, were more common in men and women who were overweight or obese and in those with a raised...
waist circumference. Overweight or obese men also had a higher prevalence of stroke compared with those not overweight. The prevalence of falls among women was greater in those overweight including obese than in those of desirable weight or less.

**Hypertension**

Hypertension is a major predisposing factor for stroke and other cerebrovascular diseases and for heart disease. Following latest guidelines on hypertension management, people with high blood pressure (hypertension) are defined as those with a systolic blood pressure (SBP) of ≥140 mmHg, a diastolic blood pressure (DBP) of ≥90 mmHg, or taking drugs for high blood pressure. 62% of men and 64% of women aged 65 and over were hypertensive. The prevalence of hypertension increased with age in women but not men, reaching a peak in those aged 80-84 (59% of women aged 65-69, 71% aged 80-84).

Treatment rates were estimated by examining the proportion of all those defined as having high blood pressure who were on treatment at the time of the survey. 59% of men and 63% of women with hypertension were on treatment to reduce their blood pressure, but among those taking antihypertensive medication, only 50% of men and 45% of women had well-controlled blood pressure (a measured BP <140/90 mmHg).
The prevalence of untreated and controlled hypertension (≥140/90 mmHg) varied substantially by Government Office Region (GOR). For both men and women, prevalence of untreated hypertension was lowest in London and highest in the North East. The prevalence of controlled hypertension was highest in London for both sexes and lowest for men in Yorkshire and the Humber and for women in the East of England.

The prevalence of untreated hypertension (>140/90mmHg) varied by income, being highest among those in the lowest income quintile. The prevalence of untreated hypertension at the more severe level (≥160/100mmHg) varied significantly by income in both men and women.

**Dietary salt**

There is a direct relationship between dietary electrolyte consumption and blood pressure. Clinical trials show that a reduction in salt (NaCl) intake reduces blood pressure levels in normotensive and hypertensive populations and prevents the development of hypertension.

Overall, more women than men reported that salt is added when cooking (58% of men, 62% of women). However, more men than women generally add salt at the table without tasting (26% compared with 15%) and more women rarely or never add salt (49% of men, 61% of women).
Social capital can be defined as the resources available through membership of social networks or communities. Research in recent years has sought to establish the extent to which social capital influences health and health inequalities. Social capital can be considered both an attribute of individuals and the larger community.

**Social capital at the individual level**

Men had lower stocks of social capital than women for measures at the individual level. More men than women reported having a severe lack of perceived social support (18% and 11% respectively). Levels of contact with friends were more likely to be low among men than women (36% and 31% respectively), and there was a similar pattern for levels of contact with members of the family not living with the informants (31% of men, 24% of women had low levels of contact). More women than men reported high levels of trust in people in general (46% and 42% respectively). Women were also more likely than men to report participating in at least one organised association (48% of women, 44% of men).

**Social capital at the local area level**

Neighbourhoods were classified as having high, medium or low stocks of social capital on the basis of informants’ views about their area. Among men and women, those aged 65-69 were more likely to live in areas viewed most negatively, compared with those aged 75-79. People in Spearhead PCTs were more likely to live in areas viewed most negatively, compared with those in non-Spearhead PCTs, and among women in Spearhead PCTs, those in the lowest income group were more likely to live in areas viewed most negatively.

Neighbourhoods were classified as having high, medium or low levels of ease of access to local amenities, based on informants’ views on how easy it was to get to a medium or large supermarket, and the post office. More women than men lived in areas viewed as having low levels of access to local amenities (31% and 29% respectively). Living in areas with low levels of access was more likely with increasing age. This may reflect an uneven distribution of age groups within individual areas. Perceptions of ease of access may also change with age, influenced by personal circumstances including reduced mobility or other health problems, and it is possible that some areas with higher than average concentrations of the oldest age groups may have relatively poor local amenities.

Where dimensions of social capital were associated with health, it was generally the case that poorer health was linked to lower stocks of social capital. For men and women, participation in organised associations was linked with better measures of general health and not smoking, and for men only, participation also reduced the odds of hypertension. In addition, men’s psychosocial health was related to their access to local amenities. Women’s health outcomes were linked to positive social network measures; contact with friends was related to better general health, and perceived social support to better psychosocial health and not smoking.
Health Service use

The government’s National Service Framework for Older People, a ten-year strategy for health and social care, recognised the range and complexity of older people’s healthcare needs. It also set standards relevant to the range of health and social care for older people provided by the public, voluntary and private sectors, including the NHS and local authorities, for older people in their homes, in residential care and in hospital. In HSE 2005, questions were asked about the use of three types of health service: GPs, hospital services and dental check-ups (not treatment).

**GP consultations**

The proportion of older people who visited a GP in the last two weeks was the same for men and women (both 22%), and GP attendance was not related to age. The annual GP contact rate was 6.8 visits per year for men and 6.9 for women.

Whether an older person had consulted a GP in the last two weeks was strongly related to their own assessment of their general health. 38% of men and 34% of women who rated their health as bad or very bad had attended a GP in the last two weeks, compared with 16% of men and 17% of women who described their health as good or very good. Furthermore, informants with poorer health were likely to visit their GP more often. GP consultation rates were also related to whether informants had a longstanding illness or poor psychological health.

**Hospital attendance**

Men were more likely than women to have attended hospital as an outpatient in the past 12 months (53% and 49% respectively). Outpatient attendance was more likely among older age groups. 15% of both men and women had been admitted to hospital as inpatients in the preceding 12 months. The likelihood of admission to hospital was again greater among older age groups, ranging from 10% of men and women aged between 65 and 69 to 21% of men aged between 75 and 79 and 21% of women aged 85 or over.

Hospital attendance in the last 12 months was linked to measures of current health status. Both outpatient and inpatient attendance were more likely among those who described their health as bad or very bad, and among those with limiting longstanding illness.

**Dental check-ups**

Men aged 65 and over were more likely than women still to have some of their own teeth (74% and 66% respectively). The likelihood of having one’s own teeth declined steeply with age, from 85% of men and 79% of women aged between 65 and 69 to 44% of men and 42% of women aged 85 and over. Among older people who did have some of their own
teeth, women (79%) were more likely than men (72%) to visit a dentist for regular or occasional check-ups, rather than only when they had trouble or never.

In contrast to the use of other health services, older people's dental attendance was higher among those in good health.

**Mental health**

Depression is widely acknowledged to be the most common mental health problem among older people. However, it is not uncommon for depression among older people to go undiagnosed and untreated, as it is estimated that nearly two thirds of older people with a depressive illness have never discussed this with their GP. Questions were included in HSE 2005 to assess the overall prevalence of depression among older people in the general population.

**Geriatric depression scale**

The HSE 2005 used the 10-item Geriatric Depression Scale (GDS10) for the first time, for informants aged 65 and over, using a self-completion questionnaire booklet. The questionnaire consisted of ten questions, which measured depressive symptoms such as feeling unhappy, feeling empty, helpless, or hopeless. A score of three or more depressive symptoms was defined as a high GDS10 score.

Women were more likely to have high GDS10 scores than men (28% and 22% respectively), and high GDS10 scores were more likely with increasing age among both sexes. The prevalence of high GDS10 scores was 40% for men aged 85 and over, compared with 19% for men 65-69. For women, the proportion of those aged 85 and over with high GDS10 scores was 43% compared with 20% of those aged 65-69.

The prevalence of high GDS10 scores was related to self-reported general health: 6% of men and 8% of women reporting very good health had high GDS10 scores, compared with 71% and 78% respectively among those reporting very bad health. High GDS10 scores were also more prevalent among those reporting limiting longstanding illnesses than those with non-limiting longstanding illness.

**General Health Questionnaire (GHQ12)**

The General Health Questionnaire (GHQ12) measures psychosocial wellbeing and is based on twelve items measuring general levels of happiness; depression and anxiety; sleep disturbance; and ability to cope over the last few weeks. A score of four or more is referred to as a high GHQ12 score, indicating probable psychological disturbance or mental ill health.
Women were more likely to have a high GHQ12 score than men (12% and 9% respectively) and high GHQ12 scores were also associated with age. Women aged 85 and over were more likely to score highly on the GHQ12 than women aged 65-69 (18% and 9% respectively). A similar pattern was observed for men (18% and 8% respectively).

![Prevalence of high GHQ12 score, by age and sex](image)

Among men there was a relationship between equivalised household income and high GHQ12 scores, with higher prevalence among those in the lowest income quintile than in the highest two income quintiles. High GHQ12 scores were also associated with those reporting bad or very bad general health, and those with a limiting longstanding illness.

**Self-reported health state (EQ-5D)**

The EQ-5D questionnaire provides a simple descriptive profile and a single index value for health status, based on five different dimensions: mobility, self care, ability to perform usual activities, pain/discomfort, and anxiety/depression. The dimensions for which problems were reported most often among adults aged 65 and over were pain/discomfort and mobility. 47% of men and 59% of women reported having either some problems or severe problems with pain/discomfort whilst 36% of men and 43% of women reported having problems with mobility.

With the exception of self care, a greater proportion of women reported having problems for each dimension than men, the difference being greatest for pain/discomfort. The dimensions for which fewest problems were noted were self care among both men and women (89% reported that they had no problems) and anxiety and depression among men (87% reported no problems).

For both men and women aged 65 and over, the most frequently reported health state was no reported problems in any of the five dimensions (health state 11111). 44% of men and 34% of women were in this health state. The next most common health state was where people reported having no problems across all dimensions except pain/discomfort, where some problems were reported (health state 11121, experienced by 13% of men and 15% of women). 2% of both men and women reported having some problems across all five dimensions (health state 22222).
Tariff scores were assigned to each informant based on the utilities derived for each health state, assigning a score between 1 (no health problems) and 0 (death). The mean tariff score was 0.81 for men aged 65 and over and 0.75 for women. Mean tariff scores varied with age, falling from 0.82 for men aged 65 to 69 to 0.74 for those aged 85 and over. Among women, this pattern was more pronounced; equivalent estimates were 0.80 for those aged 65 to 69 falling to 0.64 for those aged 85 and over.

For both men and women, mean tariff scores were lowest among those who reported having a limiting longstanding illness compared with those who had no longstanding illnesses.
This booklet is a summary of the findings from the 2005 Health Survey for England:


Full results are available in the survey report, and also in an anonymised data file lodged with the Data Archive at the University of Essex. Reports and data files from earlier surveys are similarly available.

For the general population, tables showing selected trends from 1993 to 2005 will be found on The Information Centre website (address below).

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The National Centre for Social Research is the largest independent social research institute in Britain, specialising in social survey and qualitative research for the development and evaluation of policy. NatCen specialises in research in public policy fields such as health, housing, employment, crime, education and political and social attitudes. Projects include ad hoc and continuous surveys, using face-to-face, telephone and postal methods; many use advanced applications of computer assisted interviewing. NatCen has approximately 300 staff, a national panel of over 1,000 interviewers and 200 nurses who work on health-related surveys.

Department of Epidemiology and Public Health at the Royal Free and University College Medical School

The Department houses over 165 staff, in 11 main research groups, namely: the Joint Health Surveys Unit, part of the Health and Social Surveys Research Group; Cancer Research UK funded Health Behaviour Unit (including Weight Concern); Central and Eastern Europe Research Group; Dental Public Health; Healthcare Evaluation Group; Life Course Social Science and Health Research Group (including the ESRC Priority Network: Capability and Resilience Research); MRC National Survey of Health and Development Unit; Psychobiology Group; Public Health Research Group; Clinical Epidemiology Group; and the Whitehall II Study. A joint post links the Department to the Department of Economics, whilst a great deal of collaborative research is conducted through the International Institute for Society and Health, housed within the Department, and across those departments forming the Division of Population Health. In addition to Epidemiology and Public Health, the Division comprises the Departments of Mental Health Sciences; Primary and Population Sciences; and the MRC Clinical Trials Unit.

The Department’s research programme is concerned particularly with social factors in health and illness, including national cross-sectional surveys of health and behaviour (such as diet), longitudinal studies of cardiovascular disease (Whitehall studies) and the English Longitudinal Study of Ageing (ELSA); international studies of cardiovascular disease and diabetes; the socio-dental indicators of need; and the socio-economic and policy implications of an ageing population.