

Non-communicable diseases in the UK

A briefing paper prepared for the UK Parliament (House of Lords)

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Introduction

The four major chronic non-communicable diseases – **cardiovascular disease, type 2 diabetes, cancers and chronic lung disease** – between them are the cause of an enormous burden of disability and suffering. They account for over 60% of deaths in the world, double the number of deaths from all infectious diseases (including HIV/AIDS, TB and malaria), maternal and perinatal conditions, and nutritional deficiencies combined.¹ 9 million of the 36 million deaths from NCDs each year occur in those aged under 60, and 80% of the total deaths from NCDs occur in low- and middle-income countries.² The majority – up to 80% – of premature deaths from these diseases could be prevented by tackling just three risk factors: poor diet (including the harmful use of alcohol), tobacco use and lack of physical activity.³

These NCDs are not necessarily ‘diseases of affluence’ – they are largely due to lifestyle changes that are, in many cases, inherent to economic development and often particularly affect the socioeconomically disadvantaged: both NCD prevalence and the behaviours that lead to the diseases are often more common in lower socioeconomic groups, including in the UK.

Mental illness also falls into the category of NCDs, and is the cause of significant disability. Mental ill-health particularly impacts upon productivity at (and absenteeism from) work.

New projections of the costs of NCDs from the WHO and World Economic Forum (David Bloom at Harvard University) are that they will cost the world economy in the region of \$47 trillion over the next 20 years - \$16 trillion of which is due to mental ill-health.⁴

NCDs in the UK

NCDs are the leading cause of death in the UK – in 2008, there were 518,400 deaths from NCDs, of which 23.75% were among the under-70s.⁵ The age-standardised death rate per 100,000 is 375 per year – of which 134.9 are from cancer, 32.6 from chronic respiratory disease, and 133.7 from CVD and diabetes.⁶

The UK has seen some success – for example, between 2004 and 2009, among men there were decreases of 28% in male age-standardised mortality rates for cerebrovascular disease and ischaemic heart disease, and for women decreases of 26 and 32% respectively.⁷

However, the risk factors continue to increase, which shows that this progress is unsustainable, relying on increased use of drugs, surgery and other procedures. There is much more that can be done in delaying or preventing the diseases, before the costs of treating complications threaten to overwhelm health services: already, an estimated 10% of NHS spending is on diabetes⁸ and, with rates projected to increase from 2.6 million today to over 4 million by 2030,⁹ this figure will only escalate unless there is more success in preventing onset of the diseases.

According to a DH publication from April 2011, ‘mental ill health is the largest single cause of disability in the UK, contributing almost 23% of the overall burden of disease compared to about 16% each for cancer and cardiovascular disease. The economic and social costs of mental health problems in England are estimated at around £105 billion each year.’¹⁰ 1 in 4 British adults experience at least one diagnosable mental-health problem in any one year, and 1 in 6 experiences this at any given time.¹¹ 1 in 4 women will require treatment for depression at some time, and 1 in 10 men.¹² 2.3 million people with a mental-health condition are on benefits or out of work, with mental-health conditions the primary reason for claiming health-related benefits, with around 42% doing so.¹³ A survey in 2005/06 indicated that about 440,000 people in the UK thought they had an illness caused by stress at work, with work-related stress, anxiety or depression accounting for some 10.5 million lost working days a year.¹⁴ This is estimated to cost £30 billion in lost economic output.¹⁵

The major risk factors in the UK

a) Tobacco use

Smoking levels are falling in the UK in many groups – a success story, but with some way to go. The falls have been due to comprehensive measures of the sort required by the Framework Convention on Tobacco Control: restricting sale to children, banning advertising, smoke-free public places and high taxes. But 21% of adults in the UK still smoke, 24% of people aged under 18 are smokers,¹⁶ and tobacco kills half all users.

- Smoking is the major cause of health inequalities in the UK, accounting for two-thirds of the difference in risk of premature death between social classes. Death rates from tobacco are 2–3 times higher among those from disadvantaged social groups than among the better off.¹⁷
- Long-term smokers are disproportionately drawn from lower socioeconomic groups. In 2006, the smoking level in the most deprived ward in the country was 52% (Princess ward, Knowsley); in the least deprived it was 12% (Keyworth North ward, Rushcliffe).¹⁸
- In 2004, the *Health Survey for England 2005: The Health of Minority Ethnic Groups* showed that 40% of adult Bangladeshi men and 29% of Pakistani men smoke (above the national average).¹⁹

b) Poor diet

Poor diet can have serious health consequences – for example, failing to eat five portions of fruit and vegetables a day can increase the chances of cardiovascular disease, type 2 diabetes and some gastrointestinal cancers. Diets high in fat and sugar can contribute to the rise in obesity that fuels type 2 diabetes and other diseases – and eating more than 6g of salt a day can cause hypertension, a major cause of stroke (the average UK salt consumption in 2008 was 8.6g, a reduction of 0.9g since 2000²⁰).

- According to the Health Survey for England 2002, around 10% of children with parents working in routine or semi-routine occupations eat the recommended number of portions of fruit and vegetables, compared to 14% in managerial/professional households.²¹
- According to the UK's Food Standards Agency, men and women with a lower level of educational achievement tended to have a 'less healthy' diet, eating fewer vegetables and more chips, fried and roast potatoes.²²

c) Physical activity

Physical activity can have impressive health benefits: if it was a drug, we'd all be on it! For example, the most active people are at 30% lower risk of colon cancer than the least fit,²³ active individuals are 25–30% less likely to get stroke²⁴ and have up to half the risk of coronary heart disease compared to inactive people.²⁵ It can also have a marked impact on mental health, including improving mood, reducing symptoms of stress, anger and depression, alleviating anxiety and slowing cognitive decline.

- 88% of men in the highest income quartile in the UK took part in some form of physical activity each month (on an average of 13.5 days); this drops to 66% on an average of 10.2 days each month for those in the lowest income quartile.²⁶

d) Alcohol

The impact of the harmful use of alcohol is being increasingly recognised as a very significant risk factor by the WHO and others – it can lead to over 40 medical conditions, including cancer, stroke, hypertension, liver disease and heart disease.

- In the UK, alcohol costs the NHS around £2.7 billion a year and 7 per cent of all hospital admissions are alcohol related.²⁷
- The maximum recommended weekly amounts of alcohol of 21 units for men and 14 units for women – but in 2006 there were 23% on men and 12.5% of women drinking more than recommended maximum.²⁸ 67% of British people who consume alcohol at levels considered 'hazardous', and 80% of those dependent on alcohol, are male.²⁹

e) Obesity

Rates of overweight (BMI 25–29.9) and obesity (BMI 30+) have been rising in the UK for decades, including – of most concern – among children, although there are signs that this may have slowed, following concerted efforts by the government (Change4Life) as well as initiatives such as Jamie Oliver’s healthy school lunches campaign.

- 61.5% of women with routine/manual jobs in the UK have a BMI of over 25; this is significantly higher than the 49.8% among those in managerial/professional occupations.³⁰

The costs of managing and treating NCDs

Early detection of NCDs, and prompt and effective management of the diseases, can help to delay the onset of complications. This prolongs active life and delays the need for more expensive treatments and surgery. For example, the British Heart Foundation estimates that in 2006 cardiovascular disease cost the health system £14.4 billion, of which 72% was spent on hospital care and 20% on drugs, and coronary heart disease cost the health system £3.2 billion, 94% of which was spent on hospital care.

The cost of prescription medicines to control diabetes prior to complications account for just 6% of the total costs of the disease (the majority being to control and treat complications) – but, in total, diabetes and its complications cost the NHS in England and Wales an estimated £9 billion a year and, as more than half these could have been prevented, this shows the importance of prevention and early detection.³¹

Development funding in low-income countries tends to be channelled to the disease priorities listed in the Millennium Development Goals – malaria, TB and HIV – leaving those suffering from NCDs with even less access to essential medicines. Of the estimated \$21.8 billion global development assistance for health in 2007, less than 3 per cent – \$503 million – was dedicated to NCDs. This equates to just \$0.78 per disability-adjusted life year (DALY) for NCDs in developing countries, compared to \$23.90 per DALY for HIV, TB and malaria.³² As one diabetes sufferer in Cambodia shockingly put it: ‘I wish I had AIDS.’

NCDs worldwide

Driven by an increase in exposure to the risk factors (as well as progress in overcoming communicable diseases), NCDs are increasing worldwide. Preventing or delaying their onset, and managing them to avoid complications, is essential to economic development.

- Cardiovascular disease killed 17.1 million people in 2004 – 29% of all global deaths. 82% of deaths from CVD take place in low- and middle-income countries, and many of these deaths will be premature.³³ For example, in South Africa 41% of deaths from CVD will be among those aged 34–65 (people of working age), compared to just 12% in the United States.³⁴
- 10–20 million people in Sub-Saharan Africa may have hypertension – and its cost-effective treatment could prevent 250,000 deaths a year.³⁵
- The International Diabetes Federation estimates that 285 million people around the world have diabetes. This total is expected to rise to 438 million within 20 years.³⁶
- In 2008, over 12 million new cases of cancer were diagnosed worldwide, an increase of a fifth in less than a decade.³⁷ Of these, an estimated 2.8 million cases are linked to diet, physical activity and weight.³⁸
- In 2010, tobacco will kill 6 million people, 72% of whom live in low- and middle-income countries.³⁹ And in developing countries, spending on tobacco can crowd out spending on other family essentials, such as education and health care, impacting further on the development of the next generation.
- Physical inactivity is estimated to cause 1.9 million deaths globally each year.⁴⁰
- The global cost of illness for mental health conditions in 2010 was estimated at US\$ \$2.5 trillion, with the cost projected to reach US\$ 6.0 trillion by 2030.⁴¹
- Low-income countries have 0.05 psychiatrists and 0.16 psychiatric nurses per 100,000 people; high-income countries have up to 200 times more.⁴²

What can be done?

NCDs are a serious omission from the Millennium Development Goals as they currently stand, given the major impact that they have on development globally. We hope that the recent UN High-level Meeting on NCDs (UN HLM) will raise awareness of the importance of NCDs as a development issue.

The **UN High-level Meeting** marked 'the end of the beginning' of the fight against the NCD epidemic. It was attended by 34 heads of state, and many health ministers (including Andrew Lansley). At the meeting, the 193 member states of the UN unanimously adopted a Political Declaration,⁴³ committing them to establishing national NCD policies over the next few years.

The Political Declaration covers a very wide range of concerns around NCDs: inequalities, gender issues, socioeconomic status (including the vicious cycle whereby NCDs and their risk factors worsen poverty, while poverty contributes to rising rates of NCDs), the importance of the early origins of health, linkages with communicable diseases such as HIV (including strengthening health systems), and the impact of other contemporary issues such as climate change, food security and food prices on NCDs.

The Declaration is then split into six main headings:

- **Responding to the challenge:** Taking a whole-of-government and a whole-of-society effort. This focuses on cooperation, leadership and multisectoral effort, and notes that there is a 'fundamental conflict of interest between the tobacco industry and public health'. It also notes that 'prevention must be the cornerstone of the global response to NCDs'.
- **Reduce risk factors and create health-promoting environments:** This focuses on developing and implementing multisectoral policies and interventions focusing on the major risk factors, including accelerating the implementation of the Framework Convention on Tobacco Control, the WHO Global Strategy on Diet, Physical Activity and Health, and the WHO Global Strategy to Reduce the Harmful Use of Alcohol. It also notes the need to promote healthy foods (e.g. working towards reformulating products, reducing salt and eliminating industrially produced trans fats), promote and support breastfeeding, and increase access to cancer screening and other medicines to prevent/control NCDs.
- **Strengthen national policies and health systems:** This calls for the establishment and strengthening of national policies and plans on NCDs by 2013, according to national circumstances, including risk factors, surveillance, treatment and care. It notes the need to take gender-based approaches and to recognise the needs of indigenous people, as well as the importance of universal coverage for poor populations. It also encourages networks to develop new medicines and technologies, particularly learning from HIV/AIDS.
- **International cooperation, including collaborative partnerships:** Exchange of best practice in health promotion, regulation, technology, medicines etc. is highlighted, and the need for the UN, development banks and other key organisations to work together. It also encourages non-health actors (including, where appropriate, the private sector) to form collaborative partnerships to reduce the risk factors.
- **Research and development:** Promotion of investment in research on prevention and control of NCDs, including incentivising innovation and using information technology.
- **Monitoring and evaluation:** Strengthening surveillance at country level is recommended – and it specifically calls on the WHO in collaboration with member states and others, to 'prepare recommendations for a set of voluntary global targets for the prevention and control of NCDs, before the end of 2012' and to consider developing national targets and indicators.
- **Follow-up:** The Secretary General is requested to submit to the General Assembly (by the end of 2012) options for strengthening action through effective partnership, and is also requested to present a report on achievements towards the fulfilment of the Political Declaration, in preparation for a comprehensive review in 2014 of progress made, including impact on achievement of the MDGs.

This is an **opportunity for the UK to take even more of a lead – at home, and abroad.**

More information about the UN Meeting on NCDs can be found on the C3 Collaborating for Health website (www.c3health.org).

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