

Preventing Chronic Disease

[1] Good afternoon. I have been asked to talk about preventing chronic disease and I want to show not only how urgent this is, but how it is – crucially – about sustainability.

[2] So here's my agenda. A short explanation of what we mean by sustainable development and why it is relevant to all of you who are interested in chronic disease. I want to show not only why prevention is essential but also how preventing chronic disease helps achieve other pressing goals, such as tackling global warming. And I shall explore why there is resistance to giving higher priority to prevention and suggest how we can move towards a more sustainable approach to social policy.

[3] We have spent two days talking about 'managing chronic disease' and now, on the last afternoon, we are turning our attention to prevention. It does bring certain images to mind but I am glad that we do at last have this opportunity

[4] Here's what I mean by sustainable development. It provides a single framework for public policy and practice. So that we pursue health and well being for everyone today without putting the health and well being of future generations at risk. Taking care of today, looking out for tomorrow. It's a long-term, whole-systems approach that gives equal weight to five principles:

- Living within environmental limits
- A strong, healthy and just society
- A sustainable economy
- Good governance
- Using sound science responsibly.

[5] So here's how the logic of sustainable development applies to chronic disease.

By giving a higher priority to preventing chronic diseases, so we reduce the numbers who suffer from them, releasing resources to treat and care for those who are unavoidably ill. It also, rather obviously, improves individual health and well-being. No-one would choose, or prefer to have diabetes, arthritis, heart disease or cancer if they could choose instead to be healthy. Prevention today helps to secure the long-term viability of health services and safeguard the future for ourselves and future generations.

[6] Here's another way of seeing the connection. By promoting sustainable development we help to prevent chronic disease. And by preventing disease we help to promote low carbon living and prevent damage to the environment. The policies we need to safeguard human life on the planet are the same or very similar to those we need to prevent human illness in general and chronic disease in particular.

[7] And there's one more link in the circle. Once we bring environment into the equation, we shall need to transform social policy - at local, national and global levels. Global warming presents enormous, new challenges to the way different countries treat each others' citizens and to the way that welfare systems across the world deal with risk and disadvantage. So what I am offering today is, if you like, one part of a new sustainable social policy that we must develop as fast as we can.

[8] Chronic disease, as I am sure you all know, is a global problem.

The World Health Organisation says 66 per cent of all premature deaths are due to chronic disease. In the next decade nearly 400 million people will die from a chronic condition. These projections show that higher income countries are not the best protected.

In the developed world there are three factors that greatly exacerbate the problem and point to higher rates and greater costs in future.

[9] One is the rising epidemic of obesity – bringing with it, as we know, grave risks of heart disease, cancer and diabetes. In England, one in four is affected and the rates are rising rapidly. This currently costs £3.7 billion every year.

[10] The second factor is the rising levels of mental ill-health. Like depression.. The WHO has predicted that by 2020, this will be the second greatest contributor to the burden of disease for all ages and both sexes.¹ We are learning that above a certain level, bigger incomes don't make people happier. People in richer countries suffer from high levels of stress, anxiety and depression. These mental illnesses often lead to physical illnesses. A recent report in the Lancet found that depression does more damage to health than four major chronic conditions: angina, arthritis, asthma and diabetes.²

[11] In England alone, one in 6 are affected by mental health problems and it costs the country an eye-watering £76 billion a year - in health and social care services, lost economic output, and associated costs.

[12] The third factor, of course, is the demographic one. The ageing population. Here are projections for the UK.³ We are better at keeping people alive for longer, but not at keeping them in good health for longer.

[13] In the last two decades in England, life expectancy for men increased by just over 5 years, but healthy life expectancy increased by less than three years. So more people who are old and ill – suffering, in the main, from chronic mental and physical illness.

[14] And there's a vicious circle here. Those who are poor are more likely to suffer from chronic disease, and more likely to suffer more severely. Having a chronic condition is often a cause of poverty: it undermines one's capacity to earn a living, and consumes personal savings. Poverty and insecurity are both causes and symptoms of chronic disease.

So what can be done to prevent chronic disease?

[15] This is what the WHO has to say. The causes are known, the risks largely preventable and [16] the key is to focus on factors that link across to the major killer diseases.

But the picture is a complex one.

[17] The UK foresight programme has produced this map of the clusters of factors that influence obesity. Food production and consumption. Individual psychology and activity levels. Society, environment, biology. And this echoes the 'whole-systems' approach that underpins sustainable development. You can't just do one thing to prevent chronic disease. You have to come at it from all angles.

[18] I want to focus on three overlapping risk factors: two very obvious ones, exercise and diet, and one which is less widely recognised as an influence over health – that is, human contact with natural environments. It is with these 'upstream' causes of illness that we find the greatest synergy between sustainable development and health, and where investment is most efficient in the medium and long term.

[19] Exercise

There is strong evidence that physical inactivity is related to ill health. As a factor that contributes to heart disease, for example, it is just as serious as smoking.

In England, as in many other countries, too few people take exercise. Two in three men and three in four women fail to take the recommended minimum of 30 minutes moderate activity five times a week.

[20] This is partly because of the vast increase in private car use and road traffic generally. People don't walk or cycle because they have alternatives that are thought to be safer and more convenient – although they very often aren't.

A reduction in motorised road traffic – and the air pollution that it causes – [21] combined with an increase in physical activity through walking and cycling would have multiple benefits. Less lung disease, less asthma. Less obesity, diabetes, cardio vascular disease, osteoporosis, certain cancers, premature death. Better mental health. [22] Significant cuts in co2 emissions and other environmental damage, that in turn present threats to health and wellbeing.

[23] It's a virtuous cycle. Public policies that promote sustainable and active travel – for everyone, not just the middle-classes - can reduce the risks of chronic disease, combat global warming and help us all to live with the resources of one planet instead of three.

[24] Diet

Poor diet – specially processed foods that are heavy in fat and sugar and certain artificial additives - is bad for physical and mental health. It's an acknowledged cause of obesity and depression.

[25] Processed foods are energy intensive. Food that travels long distances has a larger carbon footprint. Food bought locally helps to stimulate local economies. [26] That means more jobs, less poverty, giving people greater control over their own lives – all important determinants of health.

Public procurement, planning, regulation and transport policies are all levers for government to promote sustainable food production and [27] help people, regardless of their income, to enjoy a good diet. This approach is now being actively applied by a group of hospitals in Cornwall, south-west England. Buying food from local suppliers, improving the diet of patients and staff, helping to bring new jobs into the area – all as a way of improving health and using resources more efficiently over time.

[28] Another virtuous cycle. Fresh, affordable, locally produced food is good for health and better for the environment..

[29] My final example: contact with natural environments

There is sound evidence that people who have contact with natural environments have better physical and mental health. They take more exercise, feel better about themselves and reduce their risks of getting ill. A Dutch study has shown that the more green space people have access to, the better their general health – and the relationship is strongest for lower socio-economic groups. [30] Another study compared groups of people living in buildings with and without trees and grass nearby. Those without trees and grass had a less positive attitude to life Those with used public space more often and made more social contacts, also good for health. Then there is the famous study of patients recovering from gall bladder surgery – those who looked out on greenery recovered faster [31] than those who looked out on a brick wall. And so on.

Accessible, useable, natural green space encourages physical activity. [32]
Taking exercise in pleasant, natural surroundings improves people's self-esteem and mood (hence the growing popularity of green gyms).

[33] Protecting green spaces – everything from wilderness and open countryside to parks, trees-lined streets and gardens – can help to protect the environment and – on the right scale – combat global warming.

[34] The Royal Commission on Environmental Pollution had this to say in 2007.

"... access to good quality green space [...promotes...] good health, well-being and quality of life... the evidence is sufficiently strong [...for planners...] to recognise the health benefits of green space and to build green space into new and existing developments"

[35] Another virtuous cycle. Public policies that promote and safeguard high quality natural environments – and public access to them, especially for low-income groups– can promote better physical and mental health, reduce the risks of chronic disease and help to sustain the resources on which human life depends.

It is simply not sustainable to address chronic disease as something that just needs to be managed.

[36] But why, then, do governments and health systems continue to give higher priority to treatment and care, to managing rather than avoiding ill-health?

[37] Well for a start we must recognise the danger of producer capture. This is the tendency of people whose livelihoods and incomes and status and job satisfaction are derived from making people better, to overlook the

importance of reducing demand for their work. It is terribly tempting for health professionals at all levels to become preoccupied with the technicalities of caring for the sick. And when health professionals (that's clinicians and managers in health and social care systems across the developed world) have the power to influence how money is spent, there is a risk that they will overlook (or undervalue) the need to invest in measures that are designed to reduce demands for their work.

Professional interest in treatment and care tends to drain away the lion's share of resources – human energy, professional skills, political capital or financial resources - from the prevention agenda.

There are other reasons why prevention is marginal. Much more money is invested in research into the efficacy of clinical interventions than into preventative measures. Politicians who run health systems want 'quick wins' to woo their electorates and have little patience with the unglamorous long-term efforts of prevention. In some countries – including England – health systems are still organised and run separately from local government and struggle to work in partnership with those who run services that influence the wider determinants of health – education, planning, housing, transport. Health professionals are trained, managed and rewarded in ways that favour treatment and care, rather than prevention. Media campaigns exert a vital influence over political behaviour and public opinion – newspapers and television usually find it easier to tell stories about things that go wrong than about things that prevent problems occurring.

And there are all those alluring 'downstream' solutions that can fulfil a health professional's desire to 'win the battle against disease' but that detract attention from doing what it takes to make that battle redundant.

[38] Why worry about urban planning to encourage walking and cycling and to increase access to green spaces – or about agricultural policy to increase

access to fresh local food if you can prescribe a pill – and show positive results in clinical trials (even if it remains controversial)? Whose interests are really at stake here? Isn't it more important to invest in preventive measures so that fewer people need pharmaceuticals in the first place? ⁴

It's as though a programme to prevent burglary were reduced to a call for more locksmiths and glaziers.

[39] All this flies in the face of the evidence. The evidence, which is robust, shows

1. that most chronic diseases can be prevented,
2. that, given the choice, people will choose health
3. that key measures that promote sustainable development will also help to prevent chronic disease – and vice versa.
4. that tackling climate change must be a primary responsibility for health professionals and health systems, because failure to live within the natural limits of our planet is already putting the health of millions at risk, contributing to chronic disease worldwide, and threatens to have catastrophic effects on human health within a matter of decades.
5. that failure to prevent chronic diseases will have devastating effects on health systems because of the vast and ever-increasing costs of treating and caring for people who have avoidable chronic diseases.
6. this amounts to a huge waste of precious resources – that could be much better spent on healthcare to treat illnesses that cannot be avoided, on reducing domestic and global poverty and on measures that safeguard the environment for our children and grandchildren.

[40] In 2002, a report for the UK Treasury anticipated that failure to pursue what Derek Wanless, the author, called a 'fully engaged scenario' that focused on preventing ill health and making better use of current resources, would cost the NHS up to £30 billion extra every year by 2020. Here are the report's projections for three different scenarios, with the fully engaged one

on the right. It the widening gap. At today's prices, that £30 billion represents a 30 per cent increase in annual spending on health services that could be avoided.⁵

[41] There are some encouraging signs. The climate and health council, set up under the auspices of the British Medical Journal, has begun an intensive campaign with this declaration to persuade doctors that it is their duty to as guardians of health reduce carbon emissions and promote sustainable practices. Another prestigious medical journal has embraced the agenda, running a series on energy and health. [42] Here is the Lancet's take on the links between household energy efficiency and health.

[43] The National Health Service for England and Wales is a vast operation. It spends £96 billion a year. [44] If it were a country, its economy would rank 30th in the world

[45] It is just now setting up a unit to promote what it calls 'good corporate citizenship'. Encouraging the NHS to spend that £90 billion to promote sustainable development – through procurement, employment, managing energy, buildings and so on.

[46] There's a web-based toolkit for NHS managers – here it is – and the basic logic is that sustainable development can make good business sense and – crucially - help to prevent illness and improve health.

So that is encouraging. [47] So is the fact that the WHO now advocates action on climate change – reducing the causes and addressing the risks presented by global warming, especially for vulnerable people, with a view to improving population health.

[48] The WHO acknowledges that this approach represents a new dimension for health policy that reverses traditional thinking. From looking backwards to

looking forwards, 'taking action on the basis of prediction and early warning to prevent health consequences in large populations.'⁶

I hope that I have persuaded you that it is possible and necessary to give higher priority to preventing chronic disease. Of course, public health protagonists have been arguing the case for decades. What I have tried to bring to the debate today is a new sense of urgency, by linking it with mounting concerns about climate change.

[49] The key message is that we must move towards more sustainable social policy. That means

- preventing what we can prevent – probably more than three-quarters of all chronic disease
- pursuing the goals of sustainable development by preventing chronic disease
- preventing disease by means of sustainable development
- releasing resources so that we can sustain our capacity to manage unavoidable disease in the longer term
- and there's a double prize – better health and quality of life, and more efficient use of resources
- which in turn safeguards the future – and in that future, the health and well being of our children and grandchildren, the long-term viability of our health and social care services, and the natural resources on which human life depends.

That's my last virtuous cycle. The shape of sustainable social policy.

[50] Thank you.

¹ WHO initiative on depression, 2007

² The Lancet Vol 370 September 8, 2007

³ <http://www.helptheaged.org.uk/NR/rdonlyres/972B5831-4587-4EB6-A1E0-D3E15A8CEFF6/0/demographicfactsheet.pdf>; www.gad.gov.uk/population/2004/uk/wuk035y.xls

⁴ The Lancet Vol 369 January 20, 2007 169 Comment Are lipid-lowering guidelines evidence-based?

⁵ <http://www.hm-treasury.gov.uk/media/C/F/chap5.pdf>

⁶ WHO Europe, 2005, *Health and Climate Change: the “now” and “how”*.