

Preventing Chronic Disease

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Sustainable development is 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, and using sound science responsibly.

By promoting sustainable development we help to prevent chronic disease. And by preventing disease we help to promote low carbon living and to 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.

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 we need to transform social policy - at local, national and global levels, to meet the needs of the modern world.

Chronic disease 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.

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

One is the rising epidemic of obesity – bringing with it 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.

The second factor is the rising levels of mental ill-health. The WHO has predicted that by 2020, depression 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

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

The third factor is the ageing population. 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 are old and ill – suffering, in the main, from chronic mental and physical illness.

Furthermore, poverty and insecurity are both causes and symptoms of chronic disease.

So what can be done to prevent chronic disease? According to the WHO, the causes are known, the risks largely preventable and key is to focus on risk factors that link across the major killer diseases.

I shall focus on three overlapping risk factors: exercise, diet, and human contact with natural environments.

It is with these 'upstream' determinants of health that we find the greatest synergy between sustainable development and health.

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. This is partly because of the vast increase in private car use and road traffic generally.

A reduction in motorised road traffic – and the air pollution that it causes –combined with an increase in physical activity through walking and cycling would have multiple benefits: reductions in lung disease, asthma, obesity, diabetes, cardiovascular disease, osteoporosis and certain cancers; improvements in mental health; and significant cuts in CO₂

emissions and other environmental damage that in turn present threats to health and wellbeing.

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.

Diet

A poor diet made up of processed foods that are heavy in fat and sugar and certain artificial additives is bad for physical and mental health. It is an acknowledged cause of obesity and depression.

Processed foods are energy intensive. Food that travels long distances has a larger carbon footprint. Conversely, food bought locally helps to stimulate local economies, creating more jobs, reducing poverty and 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 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. They buy food from local suppliers, improving the diet of patients and staff, and helping to bring new jobs into the area – all as a way of improving health and using resources more efficiently over time.

This suggests another virtuous cycle. Fresh, affordable, locally produced food is good for health and better for the environment.

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. Research in Chicago, USA, 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, while those with trees and grass used public space more often and made more social contacts, which is also known to have positive effects on health. Another study of patients recovering from gall bladder surgery found that those who looked out on greenery recovered faster than those who looked out on a brick wall.

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

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.

The Royal Commission on Environmental Pollution said in 200 that ‘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’.

Here is 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.

Barriers to change

It is simply not sustainable to address chronic disease as something that just needs to be managed. But why do governments and health systems continue to give higher priority to managing rather than preventing ill-health?

We must recognise the danger of ‘producer capture’. Health professionals are trained, managed and rewarded in ways that favour treatment and care, rather than prevention. 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.

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. 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 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. For example, 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 such as statins and show positive results in clinical trials (even if the intervention remains controversial?³)

Meanwhile, there is robust evidence showing that

- most chronic diseases can be prevented
- given the choice, people will choose health rather than illness
- key measures that promote sustainable development will also help to prevent chronic disease – and vice versa
- tackling climate change should 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 threatening catastrophic effects on human health within a matter of decades

- 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.
- all 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.

In 2002, a report for the UK Treasury anticipated that failure to pursue what Derek Wanless, the author, called a 'fully engaged scenario' (focusing on preventing ill health and making better use of current resources), would cost the NHS up to £30 billion extra every year by 2020.⁴

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 to persuade doctors that it is their duty to as guardians of health reduce carbon emissions and promote sustainable practices. Another prestigious medical journal, the Lancet, has embraced the agenda, running a series on energy and health.

The National Health Service for England and Wales, which spends £96 billion a year, has set up a unit to promote what it calls 'good corporate citizenship', encouraging the NHS to spend that £96 billion to promote sustainable development –

through procurement, employment, managing energy, buildings and transport. A web-based toolkit for NHS managers promotes this approach, showing that sustainable development can make good business sense and – crucially – help to prevent illness and improve health.

The WHO now advocates action on climate change – to reduce the causes and address the risks presented by global warming, especially for vulnerable people, with a view to improving population health.⁵

In summary, it is possible and necessary to give higher priority to preventing chronic disease. Public health protagonists have been arguing the case for decades, but there is a new sense of urgency when it is linked with mounting concerns about climate change.

The key message is that we must move towards a more sustainable social policy. That means preventing what we can prevent – probably three-quarters of all chronic disease; pursuing the goals of sustainable development by preventing chronic disease; preventing disease by means of sustainable development; and releasing resources so that we can sustain our capacity to manage unavoidable disease in the longer term. If we do this there is a double prize – better health and quality of life, and more efficient use of resources, which in turn safeguards the future 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.

2000 words

¹ WHO initiative on depression, 2007

² The Lancet Vol 370 September 8, 2007

³ The Lancet Vol 369 January 20, 2007 169 Comment Are lipid-lowering guidelines evidence-based?

⁴ <http://www.hm-treasury.gov.uk/media/C/F/chap5.pdf>

⁵ WHO Europe, 2005, *Health and Climate Change: the “now” and “how”*.