All-Party Parliamentary health Group

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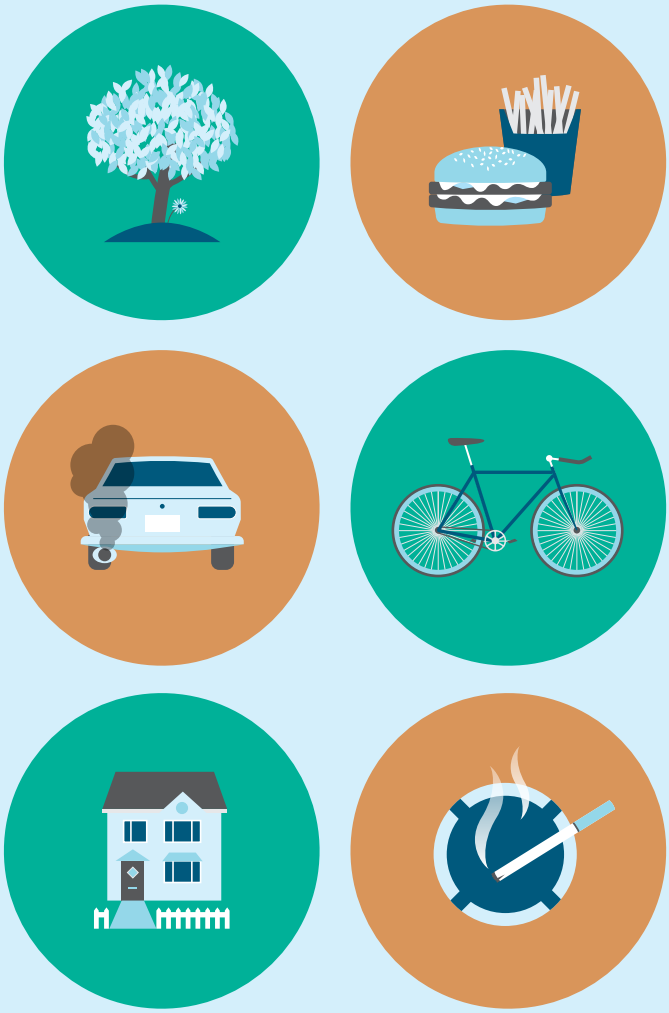
A HEALTHIER LIFE FOR ALL

THE CASE FOR CROSS-GOVERNMENT ACTION



An essay collection published jointly by The All-Party Parliamentary Health Group and the Health Foundation

SEDENTARY LIFESTYLES: OUR 21ST CENTURY INACTIVITY HEALTH NEMESIS

Dr Richard Weiler

In the five or so minutes it takes to read this article, please attempt to read it standing up, not sitting down. By making your day only marginally harder, you will begin to accumulate gains: using your muscles; switching on your brain; reducing your risk of cardiovascular disease; improving your insulin sensitivity and glucose metabolism; reducing your risk of developing diabetes, cancers and non-alcoholic fatty liver disease; and reducing musculoskeletal pain (such as lower back) and fatigue.[1,2,3,4,5,6,7,8,9] You may even burn a few additional kilocalories.[10,11,12] You may find yourself moving while reading this article and so gain even more additional health and wellbeing benefits.[13] Are you standing comfortably?

We live in the most sedentary era Homo sapiens has ever experienced, with increasingly sedentary jobs, travel and leisure occupying 9.5 or more hours of our waking day.[14,15,16] We are living longer than ever before,[17] but suffer additional longevity with rising levels of chronic disease due to unhealthy, inactive lifestyles. These diseases now account for 60% of global deaths each year,[18] of which over 5.3m are the result of physical inactivity.[19] Experts have calculated that today's inactive children will be the first generation to live shorter lives than their parents.[20] Sitting has become our 'normal'. When we sit, the opportunity cost of not moving deprives our bodies of countless health benefits.[12] Sitting is an unhealthy behaviour, but separate to other disease risk factors such as smoking, alcohol consumption, and perhaps even physical inactivity.[21]

For individuals with high levels of physical activity, sedentary behaviour does not seem to influence health benefits too dramatically.[22,23] However, high levels of physical activity are rare: when physical activity is objectively measured, up to 95% of the adult population do not meet minimum internationally recommended levels of activity to confer even basic health benefits.[24] While sitting has been linked to the risk of cardiovascular events in physically inactive women,[22] sedentary behaviour does not appear to be linked to mortality risk in cohorts of physically active London civil servants.[23] However, a recent study of over 200,000 adults demonstrated that substituting one hour of sitting with walking each day was linked to a 12%–13% decrease in all-cause mortality; simply replacing one hour of sitting with standing led to a 5% decrease.[25]

Efforts to reduce sedentary behaviour have focused on established interventions to address the conditions that affect the greatest number of people – such as lower back pain (affecting one in three UK adults each year), metabolic syndrome (affecting one in four UK adults) and type 2 diabetes (affecting 3.2 million UK adults) – as well as targeting those who sit for extreme amounts of time (eg older adults).[26]

In the UK, working adults spend approximately 60% of their waking hours (9–10 hours: 6–7 hours at work and 3 hours at home) sitting down[14]. This rises to 70% for growing numbers of people at high risk of chronic disease.[27] Office workers typically sit for 65%–75% of their working day, of which more than half represents prolonged sedentary periods. On days off work, people sit for up to 2.5 hours less,[28,29,30,31,32] so reducing occupational sedentary behaviour is becoming an increasingly important focus for research and interventions.

"In the UK, working adults spend approximately 60% of their waking hours…sitting down."

Children spend most of their school day sitting and most spend many hours watching screens after school and at weekends.[24,33] These behaviours learnt in childhood often inform behaviours in adulthood.[34,35,36] Sedentary behaviour also increases with age,[37] making interventions in childhood increasingly important. Inactivity in the early years is associated with adverse cardiometabolic profiles,[38] lower cognitive development and chronic diseases typical of adulthood: type 2 diabetes and cardiovascular disease are now seen in children of primary school age.[39,40,41] Australia, the US and Finland have released recommendations that children should only sit for 1–2 hours a day,[42,43] which would be difficult to achieve in the UK without a targeted children's strategy, active lifestyle education and active curriculums.[44]

Older adults are often wrongly perceived as requiring more rest; they typically sit for 10 or more hours a day, making them the most sedentary group.[45] They are therefore at greatest risk of suffering from illnesses associated with sedentary behaviour and inactivity.[46] Sitting exacerbates the risk of falls, illness, hospital admissions and mortality, while exercise mitigates these risks.[47,48] For frail older adults, reducing the amount of time they sit and taking breaks from prolonged sitting through standing or light movement can have a positive impact.[12] Greater understanding of the interventions that can resolve sedentary behaviour and inactivity in older adults is needed, but in the meantime the social 'norms' of rest and 'taking it easy' need to be dispelled.

Research to clearly demonstrate specific economic incentives for reducing sedentary behaviour is currently lacking. However, workplace studies have shown that interventions to promote standing breaks and adjustable sit/stand workstations may help reduce sitting time[49] and may also improve work productivity, quality, efficiency and collaboration among employees.[50] They could also influence activity behaviours outside work.[51]

Research into sedentary behaviour is evolving; however it is clear that, as a nation, we spend too much time sitting and not enough time moving. Health care services are crippled by the burden of avoidable diseases associated with sedentary lifestyles, which have wide-reaching negative societal effects and cause much suffering. These rising trends are evident in our children and will burden our ageing population even more in the future. At present, primary prevention has little place in our health care services, which are archaically and unsustainably designed to treat disease rather than promote health.

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Policymakers must look beyond health care to solve sedentary lifestyle problems. They need to ensure environments and behaviours across society change and become movement-focused. Moving more, and sitting less, needs to become the new 'normal'. Physical activity and exercise are the best available medicines to cure our 21st century inactivity health nemesis. As the vast majority of the population are physically inactive and highly sedentary, changing these lifestyle behaviours urgently requires our attention.

KEEPING THE WORKFORCE HEALTHY

Professor Dame Carol Black

There is strong evidence that 'good' work is beneficial for physical and mental health, whereas unemployment and absence due to long-term sickness often have a harmful impact.[1] 'Good' work is difficult to define, but for employees it generally concerns the ability to develop skills; flexibility and control over working hours and the pace of work; trust, communication and the ability to have a say in the decisions that affect them; and a balance between effort and reward.[2]

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My review – *Working for a healthier tomorrow* – recognised that there is strong and growing evidence that being in work is closely and powerfully linked to health and wellbeing, and that these need to be addressed together.[3] However, it is also true to say that inappropriate work environments can exacerbate health problems.[4] A more recent report I was involved in puts the approximate annual cost to business of sickness absence in the UK workplace at £15bn.[5] What is more, employers also face significant costs due to employees attending work while sick, known as 'presenteeism'.

There are two main conditions that disproportionally lead to people struggling to maintain or gain employment: mental health and musculoskeletal conditions. At any given point in time, around one in six people of working age in England has a mental health condition.[6] Of these, the majority have either depressive disorders, anxiety disorders, or a mixture of the two.[7] Almost a quarter (23%) of Jobseeker's Allowance claimants, and more than 40% of incapacity benefits claimants, have a mental health problem.[8]

Evidence collected for my forthcoming review on addiction and obesity also shows that mental health is associated with a range of other conditions, such as obesity, drug addiction and alcoholism, which have a significant impact on society. The Mental Health Taskforce recently put current NHS spending on mental health in England at £34bn a year – an insufficient figure to meet current demand.[9]

Musculoskeletal conditions account for around 55% of all work-related illness and are the second most commonly identified cause of long-term absence for manual workers (44%).[10] The Office for National Statistics found that musculoskeletal conditions cost the UK economy more than 30m working days in 2013.[11] Musculoskeletal conditions also show comorbidity with a range of other conditions, including mental health.

These conditions play against longer-term trends of an ageing workforce. EUROSTAT projects that, given current trends, the number of people in the UK over the age of 65 will be equivalent to more than 37% of the population aged 15–64 by 2040.[12] Currently, more than a million people aged over 65 are in some form of employment in the UK.[13] With the likely continued rise in the pension age, employers will also need to effectively manage chronic conditions in the workplace.

For individuals there is a strong case for gaining and maintaining employment. For employers the simple logic is that effective investment in health and wellbeing means they save more through improved productivity than the original investment.[14] For governments, the costs of evidence-based interventions can often be offset against the benefit savings and tax gains when individuals find or stay in work.[15]

So, the real question is: what is effective? We're gaining more insights into the importance of specific aspects of 'good' work and how it is related to workplace culture and services, including: leadership; effective line management and employee support; good relationships at work; autonomy for workers in their work; return-to-work schemes; regular hours; decent pay; and job security.[16] Of these, there is increasing evidence that line manager training and board engagement are critical in driving through the required culture change in the workplace.[17]

Similarly, the body of evidence is growing on the effectiveness of organisational wellness programmes.[18] Evidence-based guidance on how to promote health and wellbeing in the workplace is now available through a variety of organisations, including National Institute for Health and Care Excellence (NICE) guidelines, the Department of Health's work on wellbeing and work, and Public Health England's Work and Wellbeing Charter – as well as the Chartered Institute of Professional Development and other business groups such as Business in the Community and Engage for Success. Wider initiatives such as Britain's Healthiest Workplace have helped to make the case that improving the health and wellbeing of staff makes business sense.

For their part, public services should try to break out of their silos. If we accept that 'good' work is associated with better health outcomes, health professionals may need to engage more with employment outcomes. The 'fit note', asking GPs to focus more on return to work rather than signing people off work, is one such effort. Another example is the government-funded 'Fit for Work' service, which provides expert occupational health advice to employers and employees on the return to work of employees who have been off sick for more than four weeks.[19]

If mental health problems are one of the most significant barriers preventing people on benefits from taking up employment, then why not transform how the benefits system supports them and focus more on improving mental health in the benefit system? The new Joint Work and Health Unit is a good example of a more integrated approach. With funding of £115m, it aims to halve the disability employment gap by putting a million more disabled people into work; it also seeks to reduce health inequalities around gender, age and geography.

Given the costs to society, can government do more to support evidence-based workplace interventions through the tax system, guidance or subsidies? A lesson from several reviews is that government/employer interventions need to come sooner to prevent health conditions that affect employment from becoming chronic and structural.

"Interventions need to come sooner to prevent health conditions that affect employment from becoming chronic and structural."

Ultimately, gaining or maintaining 'good' employment and improving workplace health has the potential to make a significant contribution to personal wellbeing, the economy and reducing levels of disease and illness in society.