Health benefits of the natural environment - Evidence Summary

Physical health

- The National Ecosystem Assessment (2011) found that observing nature and participating in physical activity in green spaces plays an important role in positively influencing human health and well-being. Exercise in green places is associated with positive health outcomes, which exceed those experienced from exercising in environments lacking nature (i.e. indoors). If 1% of the sedentary population moved to a healthy pathway, 1,063 lives and £1.44 billion would be saved each year.

- Natural England’s report (2009) into their Walking the Way to Health Initiative scheme found that if everyone was given equal access to green space, the estimated saving to the NHS would be £2.1 billion per year. The report found that people are 24% more likely to be physically active if they have access to green space. The current cost to the UK economy due to physical inactivity is £8.2 billion a year (Chief Medical Officer 2004).

- Health inequality in England is estimated to cost up to £70 billion each year (The Marmot Review 2010). Increasing people’s access to green space and their participation in it represents a relatively low cost intervention method to help reduce this cost.

- A study by Bell, Wilson and Liu (2008) published in the American Journal of Preventative Medicine found that children who live close to green spaces have higher levels of physical activity and are less likely to experience an increase in Body Mass Index (BMI) over time.

Mental health

- A study by the Centre for Research on Environment, Society and Health (2012) found that regular exercise in a natural environment can cut the risk of suffering from poor mental health by 50%. Exercising indoors was found to yield no significant benefits for mental health, when compared with the outdoor environment.

- Increasing access and participation in green spaces has an important positive impact on mental health. Maas et al (2009) found that green space was important in affecting anxiety, depression, loneliness and social support; a lack of green space had negative affects on these factors. A study by Roe et al (2013) published in the International Journal of Environmental Health Research found that accessing green space significantly lowered peoples stress levels and improved concentration and mood. The economic and social costs of mental
illness in England were estimated to be £105 billion in 2010 (Centre for Mental Health 2010).

- Mind’s (the mental health charity) Ecominds scheme (2013) helped 254 people find full time-time employment. Economic analysis of these case studies found that this could have saved the government £1.46 million pounds over one year. This was through a reduction in JSA claims, increased National Insurance payments and a reduction in the costs to the NHS of associated health problems associated with unemployment (e.g. depression). The cost saving to the government from 5 people with mental health problems participating in the program was £35,000 a year. One specific example of a young woman showed a £19,440 cost saving to the government, based on a £5,000 to £7,000 investment. 69% of more than 12,000 participants experienced significant increases in wellbeing.

- A report from the UK Faculty of Public Health (2010) calls for GPs to use more alternatives to medication for mental illness and to increase physical activity, as the two are linked. They recommend that GPs should provide advice about physical activity in green spaces as an alternative to medication for patients with mild depression or anxiety. Access to green spaces should also be increased and exercise schemes in green spaces should be supported and expanded.

General

- A review of the evidence surrounding participation in environmental enhancement and conservation activities for health and wellbeing by The Cochrane Collaboration (2013) found that there is growing research and policy interest in the potential of using the environment to enhance human health and wellbeing. Outdoor activities can be used as intervention methods and have the potential to not only avoid excess pharmaceutical management, improve physical and mental health and wellbeing, but may also decrease social isolation, improve practical skills, and enhance local environments.

- The RSPB Natural Thinking report (2007) found that there is compelling evidence for the natural environment to play an important role in: treatment for children with poor self-discipline, attention deficit hyperactivity disorder (ADHD); coping with anxiety and stress, particularly for patients cancer treatment; strategies to reduce crime and aggression; benefiting elderly care and treatment for dementia; concentration levels in children and office workers; stress; healthy cognitive development of children; improving hospital environments; strengthened communities; increased sense of wellbeing and mental health.
A study by Maas et al (2009) published in the Journal of Epidemiology and Community Health found that older people live longer in areas where there is more green space close to their homes. It is also extremely important for young people and lower socioeconomic groups.

A report by Forest Research (2013) found that there is growing awareness of the limitations of drug-based treatments and that the natural environment and green spaces represent a vital alternative treatment. A study by Mitchell & Popham (2008) published in The Lancet found that people living closer to green space in England had lower death rates and less heart disease. This evidence is not simply confined to the UK, De Vries (2001) calculated that in the Netherlands every 10% increase in urban green space represented a reduction in health complaints equivalent to making the population five years younger. In Japan a study into their ‘Shinrin-yoku’ forest therapy/walks found that when compared to walking in urban areas it resulted in significantly more reductions in stress levels (measured by blood pressure, pulse rate, heart rate and cortisol levels). It was even found to influence diabetes by reducing people’s blood glucose levels.

Lancashire Wildlife Trust ran a two year program from 2010 to 2012 that aimed to improve the health of men aged 45 and over. Through a program of practical conservation sessions over 196 individuals participated in the project, with 83% of these stating that they felt healthier as a result of the project.

A study by Nesta and Innovation Unit (2013) into social prescribing found that out of over 1000 GP’s surveyed, 90% thought patients would benefit from social prescribing. Previous Nesta research found that social prescribing can improve health outcomes for people with long-term conditions and reduce demands on the health system. In the UK long-term health conditions account for over half of GP appointments, two-thirds of outpatient appointments and 70 per cent of inpatient bed days. Only 9% of patients had received a social prescription, yet over half said they would like one. Patients could be prescribed existing practical conservation projects.

Medical professionals are concerned that our spending more time on screens will lead to a more sedentary lifestyle. A study by Childwise (2013) found that by the age of seven, children will on average have spent a full year of their lives on screens. This will increase the likelihood of obesity and related health problems.
References


National Ecosystem Services Assessment (2011): http://uknea.unep-wcmc.org/LinkClick.aspx?fileticket=S901pJcQm%2fQ%3d&tabid=82


