Health benefits of outdoor therapies

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Abstract


Poor physical and mental health is often related to modern lifestyles that can result in individuals having too little exercise and a poor diet, as well as experiencing feelings of stress and isolation. Medical interventions may treat the symptoms but fail to address the cause.

This article discusses how promoting the use of green spaces could be an alternative way of preventing health problems and enhancing wellbeing. It looks at some of the schemes that are designed to encourage people to engage in outdoor activities, and the wider benefits of this approach to health promotion.

In 2010, a major research project examining the link between individuals’ health and wellbeing and their use of the outdoors was instigated. The Outdoors and Health Network is a collaborative project between policy makers, social scientists and medical professionals that seeks to add scientific rigour and government action to something we all probably intuitively know – that human beings benefit physically, mentally, spiritually and socially from a closer relationship with nature (Marshall et al, 2010).

Various forms of poor health are related to factors associated with modern lifestyles, such as lack of exercise, poor diet, stress and isolation. In such cases, medical interventions may alleviate the symptoms without addressing the cause. Promoting the use of the outdoors could be an alternative way to prevent disease and promote physical and mental health.

Why being outdoors boosts health

Although intuitively felt, the actual relationship between engagement with the outdoors and positive health outcomes is difficult to both understand and to quantify. However, Croucher et al (2007) attempted to do this; their review of the literature demonstrated a clear, positive relationship between health and the proximity and use of green spaces. Although they highlighted the limited information available on the positive effects on health of green spaces, they identified links with improved physical health (Mitchell and Popham, 2008), mental health (Neilson and Hansen, 2007) and societal health (Dines et al, 2006).

Despite this scarcity of evidence, there are a number of theories that can throw some light on some of the potential influences, even if it is not possible to explain them fully.

Wilson (1984) introduced the notion of an instinctive bond between humans and other living systems. He suggested the connections we subconsciously make with other forms of life are an evolutionary step in our development and necessary for health and wellbeing. Ulrich (1984) used this theory to produce a pioneering study demonstrating a link between recovery rates from surgery and views of nature. Recent research continues to reinforce this theory (Hansen-Ketchum and Halpenny, 2011).

Ulrich continued to explore this notion and became associated with a body of work emphasising the reduction of stress as a key factor in the link between the outdoors and health. His “stress reduction theory” suggested that natural stimuli, mostly of the visual kind, trigger emotional and physiological responses that improve health problems exacerbated by stress (Kjellgren and Buhkall, 2010).

Kaplan and Kaplan (1989) drew attention to the negative effect of attention fatigue. Attention restoration theory states that natural environments allow people to distance themselves from routine activities, concentrate better and reduce stress levels (Kaplan, 1995). Cimprich and Ronis (2003) linked this theory to improved outcomes for patients with newly diagnosed breast cancer.

All these theories are linked by what could be called the passive benefits of green space, namely the restorative effect of relaxation, stress reduction and positive feelings of wellbeing. Of course there are also the active benefits associated with vitality and exercise, which are just as important.

Incentive for exercise

Many authors have investigated the benefits of exercise on health, both physical and mental, as well as the psychological benefits of time spent outdoors. The Green Exercise Research team at the University of Essex has taken this a step further by producing a wealth of evidence demonstrating a synergistic relationship between the psychological benefits of green space and physical exercise within it (Pretty et al, 2005). Later independent work by Verheij et al (2008) and Cleland et al (2008)
Engaging in outdoor pursuits, such as cycling, will have a positive effect on health and wellbeing. Research suggests that supervised exercise programmes can be as effective as antidepressants in treating mild-to-moderate depression (Halliwell, 2005). A particularly interesting project that built on this work was the Forestry Commission’s Branching Out project, which concentrated on providing activities within a woodland setting. The 12-week course of three hours a week included elements of bushcraft, nature conservation, environmental art, green exercise and relaxation. Its own internal report showed that this, and similar projects, could be used to treat mental health service users in acute and tertiary care (Wilson, 2009). Wilson et al (2007) had previously explored the notion of “eco-therapies” and found their holistic effects made them highly beneficial for people using acute and tertiary mental health services.

From a physical health perspective BTCV pioneered the development of the Green Gym, which combines environmental volunteering concepts and keep-fit regimens for people who do not wish to use conventional gyms. Green Gym groups meet at least once a week and do 1-4 hours of practical conservation or gardening work. Originally developed by Oxford-based GP William Bird in 1997, the concept has spread throughout the UK. It has shown improved cardiovascular health and muscular strength, increased bone density and weight loss, as well as positive outcomes on depression and some mental health issues (Reynolds, 2002). A similar project, Blue Gym, aims to use coastal and inland waters for the same purpose.

As GPs can refer patients to these projects they are sometimes called “green prescriptions”; their positive effects on several practices in New Zealand have been documented (Elley et al, 2003). Natural England, the government’s adviser on the natural environment, often promotes Blue and Green Gyms and actively highlights links between green space and health. In 2008, it launched a campaign calling for a Natural Health Service; this had two main aims:

- To increase the proportion of households within five minutes’ walk of green space of at least two hectares;
- To support primary healthcare teams in signposting patients to an approved health walk or outdoor activity programme.

It piloted a range of green exercise projects and developed the Walking for Health programme, which provides support for individuals – particularly older people, those with existing physical or mental health problems and those who are obese – taking regular brisk walks as a means of improving their health. This is linked to larger programmes promoting physical activity, such as Walk4Life and Let’s Get Moving, a physical activity care pathway developed for the NHS.

Scotland has its own version of the scheme called Paths to Health, and has developed a range of innovative projects including the UK’s first hospital ranger, working at Forth Valley Hospital in Larbert. This collaborative project between the Forestry Commission and NHS Forth Valley encourages patients to use the woodland surrounding the hospital as a health resource.

The team at Essex University has also been involved in some innovative projects under its Green Exercise umbrella. These include working with people who have dementia and teenagers who are vulnerable.

Nurses can play an important role in helping individuals to access outdoor therapy projects. This is encouraging, as intuitive notions are not enough to provoke change in a health system driven by evidence-based interventions.

Central and local government have been slow to recognise the benefits of outdoor therapies so it has largely been left to the third sector to address this issue.

Mental health charity, Mind, and environmental volunteering charity British Trust for Conservation Volunteers (BTCV) have developed pioneering projects in the fields of both mental and physical health. Ecominds is a Mind project, which funds environmental projects that help people with experience of mental distress to get involved in local green activities with the aim of improving confidence, self-esteem and physical health. Projects range from horticultural and agricultural schemes to walking groups and recycling projects. These schemes have a three-fold effect – they improve the environment, provide therapy and forge links between the community and service users. As a result, they break down barriers and discrimination.

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5 key points

1. Poor physical and mental health is often related to modern lifestyles with a lack of exercise, poor diet, stress and isolation.

2. Outdoor activities can help people relax, reduce stress and instil a sense of wellbeing.

3. Exercising in a green space is more beneficial than forms that concentrate on exertion without considering the surroundings.

4. Promoting outdoor activity could save money through fewer medical interventions, prescription drugs and hospital admissions.

5. Nurses can play an important role in helping individuals to access outdoor therapy projects.
this issue and has produced two reports that identify these gaps in knowledge and suggest future studies (Currie et al, 2010; Marshall et al, 2010). With this in mind, it might be time to reflect on the lack of success associated with many approaches to targeting individual harmful health behaviours. Perhaps a move towards a more sophisticated socio-ecological model, which produces sustainable conditions where healthy behaviours can occur independently of income and education, could be more successful.

Nurses, particularly those working in primary care, public health and mental health can help patients to access outdoor projects. This can be done by individual practitioners or in wider joint initiatives with policy makers, town planners, medical staff, the voluntary sector, community groups, the media and the general public. An example of a health problem that could be tackled by this approach is childhood obesity (Bell et al, 2008). A growing evidence base confirms the benefits to human health and wellbeing of close contact with nature, animals and plants, and there are a wide range of opportunities for nurses to refer and support patients to make the most of these benefits.

Apart from the general projects covered in this brief overview, there is growing number of green care projects across the world. These include care farming, animal-assisted interventions, social and therapeutic horticulture, wilderness therapy and healing gardens. These schemes are on our doorsteps, free and without side-effects – let’s use them.

References
Hansen-Ketchum PA, Halpenny EA (2011) Engaging with nature to promote health: bridging research silos to examine the evidence. Health Promotion International; 26: 1, 100-108.