research

Benefits of access to green space

Two studies published in Social Science & Medicine looked at how access to green space could potentially have a positive impact on physical health and well-being.

Coombes and Jones (2010) examined the association between accessibility to green space and the odds of those surveyed achieving the recommended amount of moderate physical activity (30 minutes, five times a week) or being overweight. They found that green space was less likely to be used with increased distance, and that respondents living closest to green space classified as a ‘formal park’ were more likely to achieve the physical activity recommendation and less likely to be overweight or obese.

Van de Berg (2010) looked at whether the presence of green space could lessen the impact of stress. Percentages of green space in a one kilometre and three kilometre radius around people’s homes were looked at in relation to the number of health complaints made in the previous 14 days, and perceived mental and general health.

It was found that people with a high amount of green space in a three-kilometre radius were less affected by stressful life experiences than those with a low amount of green space in this radius. Both of these studies indicate that access to green space has potential health and well-being benefits.

Editor’s note: To read an article about the Green Gyms scheme (Dec 2010, IT e-Xtra), which encourages people to benefit from their local environment and keep physically active, log in to the Members’ area of the FHT website and click on the ‘IT e-Xtra archive’ option.


Massage and touch therapy in newborns

Infant massage has been practised for thousands of years in many Eastern cultures. As its popularity grows among parents and professionals in the West, a recent review of the literature looked at the benefits, possible mechanism of action and adverse effects of touch and massage therapy in neonates.

The review, conducted in India, suggests that massage ‘has several positive effects in terms of weight gain, better sleep-wake pattern, enhanced neuromotor development, better emotional bonding, reduced rates of nosocomial infection [an infection acquired while in hospital] and, thereby, reduced mortality rates in the hospitalised patients’.

The review also highlighted that massage was ‘found to be more useful when some kind of lubricant oil was used’, and that ‘harmful effects like physical injury and increased risk of infection were encountered when performed incorrectly’.


Strapping tape - performance and storage

Rigid adhesive strapping tapes are commonly used in the prevention and management of musculoskeletal injuries. A study compared the mechanical properties of six different types of rigid adhesive tapes commonly available in Australia, and whether storage temperature had any impact on the tapes’ performance.

The mechanical properties of each tape were tested using configurations that mimicked an ankle strapping in a climate- and humidity-controlled laboratory. A roll of each tape was then stored for one month in a refrigerator and in a sports bag in a car. All tapes were retested.

The authors found that ‘significant differences in tensile load and elongation to failure existed at initial testing and after storage when comparing different tapes. Significant changes in mechanical properties also occurred within tapes when comparing initial and post-storage measures.’

More research was called for to test on-field tape performance and to determine optimal storage conditions to maximise the on-field performance of tapes.


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A pilott study published in Complementary Therapies in Clinical Practice looked at whether aromatherapy massage could improve constipation and enhance quality of life in patients with advanced cancer. 

According to the authors of the study, constipation is a common problem for people with advanced cancer, affecting up to 80 per cent of all palliative care patients. It can be caused by a number of factors, such as reduced fluid and fibre intake, decreased activity, lack of privacy, pathological changes, an obstruction in the intestines, or as a result of pharmacological intervention.

Thirty-two patients with advanced cancer and constipation completed the study at a hospital in China, having been randomly assigned to a control group or one of two intervention groups: plain abdominal massage or aroma abdominal massage. Both intervention groups received a daily 15 to 20-minute treatment, for five consecutive days. Essential oils used for patients in the aroma massage group included bitter orange, black pepper, rosemary, marjoram, and patchouli, and were chosen and blended after individual assessment. Constipation and quality of life measures were taken on day one and five of the study.

On comparing data, constipation scores improved in both the aroma massage group (dropping from 5.62 to 1.46, mean difference minus 4.16) and plain massage group (from 4.18 to 1.55, mean difference minus 2.64), but increased in the control group (from 5.63 to 6.63). The average number of bowel movements per day was higher in the aroma massage and plain massage groups than the control group (0.86, 0.34 and 0.12 respectively).

Patients also reported improvements in their well-being and quality of life when their constipation was less severe.

The authors noted that aroma massage provided a more comfortable intervention for constipation compared to oral and rectal medications, and that the effects of touch and the supportive attitude of nurses during the massage process should also be considered in terms of patients feeling more supported. They suggested that ‘it may be valuable to educate a patient’s family members to perform abdominal massage at home on a regular basis to enable patients to develop good bowel habits’.


Yoga and musculoskeletal problems

A study in Turkey investigated the effects of yoga on balance and gait in women with musculoskeletal problems.

Twenty-seven women aged between 30 and 45, who had been diagnosed with a musculoskeletal problem, such as osteoarthritis and/or low back pain, and who were experiencing gait and balance problems, took part in the study.

After initial gait and balance measurements were taken, subjects embarked on a yoga programme, comprising eight one-hour sessions, two times a week. The programme included a 15-minute warm-up and breathing exercises, simple asanas (selected according to the individual’s problems), followed by 30 minutes of relaxation.

After completion of the programme, improvements noted by the researchers and subjects included ‘better gait pattern, less step length differences, higher gait speed and range, and equal overall distribution of force to maintain front-back and side balance’.

The authors of the study concluded that ‘yoga programmes should be considered as alternative or additional approaches for the treatment and management of systemic, chronic and persistent musculoskeletal conditions’. They added: ‘Yoga can be practised anywhere and can also be practised individually or in groups so encouraging social interaction and it may be incorporated into rehabilitation programmes that are designed for such conditions’.


Music may relieve anxiety for patients on assisted breathing

A systematic review published in The Cochrane Library looked at the effect of music on anxiety and physiological responses in patients receiving mechanical ventilation to aid their breathing.

Eight trials met the inclusion criteria (213 participants), of which seven involved patients listening to pre-recorded music. In the eighth trial, a music therapist played live music at a tempo that matched the patient’s respiratory rate.

The findings indicate that listening to music may have a beneficial effect on heart rate, respiratory rate, and state anxiety in mechanically ventilated patients. No evidence suggested that music had an impact on blood pressure or oxygen saturation levels.

Lead researcher Joke Bradt commented: ‘These results look promising, but we need more trials to strengthen the evidence and we would certainly be interested in seeing more research on live music interventions provided by trained music therapists. However, because music listening is an easy treatment to provide, we do recommend that music be offered as a form of stress management for critically ill patients’.