



Nature prescriptions: practical progress

Nature prescriptions need the outdoor sector as well as health care. Social obstacles to nature experience identified by medical researchers¹ have largely been overcome by the outdoor sector, which includes education, recreation, and commercial tourism; but outdoor products will not be adopted by health-care providers until they are tested and packaged as prescribable.

The outdoor sector has skills and expertise to provide safe and effective nature therapy products. These capabilities include: legal permits and logistic access for appropriate sites and activities; navigation and safety equipment, skills and knowledge; and effective guiding, including nature knowledge and emotional choreography. Using the outdoor sector has costs, but much less than the economic costs of mental health care and productivity losses. Mental health benefits from visiting nature currently contribute US\$5.1 trillion per annum to the global economy, including \$2.2 trillion through increased economic productivity and reduced health care costs.² Global spending on health care is currently \$10 trillion per annum.

Obstacles to nature experiences¹ depend on cultural backgrounds, socioeconomic circumstances, and individual life histories. These obstacles include: time, distance, and cost to get to parks; social and cultural barriers; lack of childhood nature experiences and outdoor capabilities; and psychological barriers from poor mental health.³ These obstacles can be overcome, for example, by providing group experiences that include transport to parks, equipment and clothing, experienced guides with similar ethnic and cultural backgrounds to patients, and a gradual introduction to enjoyment of nature.³ The simplest way to create effective nature prescriptions is thus to enlist the

existing outdoor industry. Currently, enlisting the existing outdoor industry occurs only for patients who are already motivated patients, at their own cost. The USA and UK have tried public-health approaches, but ineffectively.³ China's current 10-year national health strategy includes more than 1000 forest therapy facilities under construction nationwide, funded by the forests portfolio, but also relies on individual motivation.⁴ Outcomes have not yet been reported.

Research needs to reflect the complexity of nature, the diversity of patients, and the variety of nature experiences (eg, brief or extended, active or contemplative, guided or unguided). Individuals respond differently to nature components and experiences,⁵ but there is little systematic data on patterns. Medical-standard controlled trials of actual nature treatments of different types, intensities, durations, and frequencies are needed on individuals with various mental health states and symptoms, and with different social, cultural, and economic circumstances.

I declare no competing interests.

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Ralf Buckley
r.buckley@griffith.edu.au

School of Environment & Sciences, Griffith University, Southport, QLD 4222, Australia

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