

# Social prescribing: a 'natural' community-based solution

**Michelle Howarth, Alistair Griffiths, Anna da Silva, Richard Green**

*Michelle Howarth, Senior Lecturer in Nursing and Deputy Director (Programmes and training), University of Salford Manchester*

*Alistair Griffiths, Director of Science and Collections, Royal Horticultural Society (RHS)*

*Anna da Silva, Programme Director, RHS Garden Bridgewater*

*Richard Green, Head of RHS Garden Bridgewater*

[m.l.howarth2@salford.ac.uk](mailto:m.l.howarth2@salford.ac.uk)

It is acknowledged that community nurses have employed non-medical prescribing as a specialist clinical intervention since 1994 (Luker and McHugh, 2002). Non-medical prescribing is described as being an activity undertaken by specially trained nurses, working within their clinical competence as either independent and/or supplementary prescribers (Royal Pharmaceutical Society (RPS), 2016), to prescribe pharmacological products. Conversely, social prescribing refers to a non-medical asset-based process that 'supports people, via social prescribing link workers, to make community connections and discover new opportunities, building on individual strengths and preferences, to improve health and wellbeing' (National Academy for Social Prescribing, 2020), which does not include a clinical intervention. Historically, community nurses have been engaged in 'social prescribing' activities

through the process of 'community referral', which signposts patients to non-clinical solutions that improve wellbeing. However, contemporary social prescribing is thought to provide a conduit for a more comprehensive personalised approach as part of the wider NHS England (NHSE) 'universal personalised care' model (NHSE, 2019). Using asset-based approaches, rather than traditional deficit-based medical models, social prescribing is considered to be effective in supporting the resilience of individuals and communities (Henry and Howarth, 2018). The universal personalised care model has been operationalised through six key standard components across the NHS and the wider health and care system (NHSE, 2019): shared decision-making; personalised care and support planning; enabling choice; social prescribing and community-based support; supported self-management; and personal health budgets and integrated personal budgets.

Since 2016, the social prescribing movement has grown rapidly, resulting in the adoption of an array of models, processes and approaches by the health and voluntary sectors. Predicated on 'what matters to the person' as opposed to 'what's the matter with them' (NHSE, 2019), the process of social prescribing initiates personalised care through a referral to a link worker, who uses a wellbeing conversation with the beneficiary or patient to understand what matters to them. Invariably, the link worker meets with the beneficiary on a number of occasions to develop a rapport and determine the most suitable social prescription. Initiating a wellbeing conversation is typically acknowledged to form the basis of an 'holistic' model, which encompasses active listening through time spent with the patients and, where needed, collaboration with other agencies and services (Kimberlee, 2015). However, other approaches may simply signpost an individual to an asset in the community or hold a single conversation that facilitates a social prescription. These latter approaches are commonly referred to as light and medium social prescriptions, respectively (Kimberlee, 2015). The wellbeing conversation in these latter examples is limited, and, thus, opportunities for personalised approaches that support shared decision-making are often curtailed.

## ABSTRACT

This paper discusses social prescribing as part of the wider NHS England universal personalised care model, and it describes how community nurses can engage with social prescribing systems to support community resilience. A case study based on the example of gardening, as a nature-based social prescription provided by the RHS Bridgewater Wellbeing Garden, is provided to illustrate the scope, reach and impact of non-medical, salutogenic approaches for community practitioners. The authors argue that social prescribing and, in particular, nature-based solutions, such as gardening, can be used as a non-medical asset-based approach by all health professionals working in the community as a way to promote health and wellbeing. They consider how the negative impact of social distancing resulting from COVID-19 restrictions could be diluted through collaboration between a holistic, social prescribing system and community staff. The paper presents a unique perspective on how community nurses can collaborate with link workers through social prescribing to help combat social isolation and anxiety and support resilience.

## KEY WORDS

- ♦ Social prescribing ♦ Gardening ♦ Social distancing ♦ Link workers
- ♦ Resilience

## Social prescribing models

Since its inception, holistic social prescribing has influenced a paradigm shift from a pathogenic, medical model, towards a salutogenic model that embraces what makes people healthy rather than focusing on disease (Antonovsky, 1987). Significantly, salutogenesis facilitates personalised care by ensuring that the person is placed at the centre of decision-making and wrapping service provision around their needs, rather than service demands. This juxtaposed perspective gives greater credence to an individual's capacity, rather than incapacity, by facilitating access to resources that promote health and wellbeing (Lindström and Eriksson, 2005). Archetypal salutogenic approaches have buoyed asset-based community development (ABCD), which has bolstered community resilience and helped dilute traditional deficit-based models (Henry and Howarth, 2018). It is reported that ABCD approaches are effective as part of public health strategies because they can target specific communities or groups (Cook et al, 2019). The symbiotic relationship between ABCD approaches and holistic social prescribing models provides unique opportunities to use salutogenic methods to promote health and wellbeing to diverse communities. Hence, social prescribing is understood to be a key process that has facilitated the growth of personalised care across the UK. The holistic model described by Kimberlee (2015) is the preferred choice across many organisations and offers a salutogenic approach that ultimately supports a person's decision about their wellbeing—and not just an illness. This asset-based, salutogenic approach contrasts with the medical deficit approach and places the person in control of the decision-making.

Ironically, there are no standard or common social prescriptions, as each offer is personalised, based on the wellbeing conversation with the link worker. The universal personalised approach means that any asset-based solution that meets the needs of the individual can be used. This may include, for example, exercise classes, yoga, knit and natter groups, gardening or arts-based activities. The range of services reflects the wider community assets available and are typically provided through the voluntary, community and social enterprise (VCSE) sector involving charities, social enterprises, private businesses and the voluntary sector. Generally, socially prescribed services are not funded centrally and are reliant upon donations, grants and funding awards. More recently, clinical commissioning groups (CCGs) have started to fund socially prescribed services where there is a developing evidence base of effect and the needs of the local population.

## Natural solutions as a social prescription

The use of nature-based solutions has increasingly been embraced as a social prescription (Howarth and Lister, 2019). Historically, nature has been used to aid healing as far back as the 1600s, where, during the Crimean war, Florence Nightingale observed the impact of flowers on soldiers' physical and mental wellbeing (McDonald, 2009):

*'I shall never forget the rapture of fever patients over a bunch of brightly coloured flowers ... people say the effect is only on the mind. It is no such thing. The effect is on the body, too!'*

More contemporary evidence reports that access to nature can increase longevity (Takano et al, 2002), dietary intake (Christian et al, 2014) and mental health (Bragg and Atkins, 2016), and reduce the incidence of diabetes (Dalton et al, 2016). The growing evidence base presents a compelling case for the use of nature-based solutions as a social prescription because of its ability to engage a diverse population (Cook et al, 2019) and benefit social and community cohesion (Gonzalez et al, 2010). Van den Bosch and Bird (2019) argued that being exposed to nature and engaging with nature-based activities such as gardening, walking or more structured therapeutic horticulture can reduce the inflammatory response pathology and, subsequently, help prevent the development of long-term chronic conditions.

Access and use of nature can take place on different levels, each of which can be used as a social prescription. In 2005, Pretty et al proposed that there are three levels of nature: viewing, being and participating (Pretty et al, 2005). For example, a view of nature can help improve mood, anxiety and promote wellbeing, as illustrated in Ulrich's infamous study in 1984 of people recovering in hospital from cholecystectomy, in which it was reported that patients who had a view from their hospital room needed less analgesics, recovered quicker and were politer to their carers than those without a view. Even the colour of nature helps; the human eye is designed to respond quickly to colour, for example, it is acknowledged that blues relax people and induce a sense of calm and green is understood to help people rest and heal (Kurt, 2014). Equally, being outdoors in nature can help improve wellbeing, and senses such as sight, smell and touch allow people to seek out nature and in coniferous forests' phytoncides emitted by evergreen scents from trees, increasing serotonin and helping to combat stress (Li, 2009). Moreover, Bakolis et al (2018) found that birdsong can boost mental wellbeing and is a great antidote to stress and anxiety. Finally, participating in nature through structured activities, such as gardening, has a beneficial impact on all of the senses, which can ultimately improve physical and mental wellbeing. The following case study based on research with the RHS Wellbeing Garden reveals how the different levels of nature through gardening as part of a social prescription can help support people with complex, comorbid conditions.

## How nature can help as part of a social prescription

The Bridgewater Therapeutic Garden is being created within the Walled Garden, a key part of the 154-acre RHS Garden Bridgewater. The new design by Ben Brace, RHS Horticultural Project Manager, is the result of over 6 months' consultation with more than 20 organisations, including health and social care providers and charities working with people who have mental and physical health conditions. The garden aims to be a place to nurture mental, physical

and social health through gardening, as supported by recent studies (World Health Organization, 2010; Soga et al, 2016). The idea is to create a sanctuary that offers space to grow, space to reflect and space to meet others and get moving.

The Wellbeing Garden at Bridgewater includes distinct rooms, with distinct typologies. This helps to reach users at all levels and plays on the kaleidoscope of personal preferences for scent, including lavender plants, whose smell is known to have physiological effects by interacting with brain receptors and neurotransmitters to promote relaxation (Lopez et al, 2017); colours, taking into consideration the ecological valence theory of human colour preference and different hues, saturation and brightness to link with emotional responses to colour (Wilms and Oberfield, 2018); plant choices and gardening styles (Bhatti, 2010). Additionally, the transitional spaces between the rooms can be seen as journeys from one life stage or level of treatment to the next. Rooms can also aid contemplation. The garden will feature areas that help to bring people into the present moment, a form of mindfulness, and the act of gardening within it hopes to hold people in the present moment as described by the flow theory (Csikszentmihalyi, 2014). Awesome moments might be created through gardening activities, plants, colour, scent and touch, which could be as simple as giving life by germinating seedlings. It is hoped that these experiences help people to heal while reversing the challenges and potential negative health and environmental impacts of the philosophical challenge of the nature deficit disorder (Louv, 2005). Reflective spaces, planted with woodland glade plants such as birch, hazel and evergreen ferns, which incorporate fractals, can have positive psychophysiological effects (Van Den Berg, 2011). Growing spaces, including raised planters in which users will be encouraged to independently grow and care for plants of their choosing, will enable people to meet and socially reconnect with other people. Studies have shown that loneliness can have negative effects on physical and mental health, even affecting life expectancy (Yang et

al, 2013). This garden hopes to provide a place of belonging in order to reverse the challenges of social isolation. A series of circular paths will invite exploration, encourage exercise and provide positive distractions. The provision of more solitary spaces will allow for contemplation and reflection by visitors who prefer greater seclusion. It will also be a space for activities such as music, crafts, nature watching, yoga and meditation.

### Findings thus far

A total of 47 people were referred to the Wellbeing Garden for a number of reasons, including: to reduce anxiety, to develop confidence and to improve physical and/or mental wellbeing (*Figure 1*). The ages of those who attended ranged between 30 and 85 years, although the majority of people were above 60 years of age, and there was an even split between male and female referees. Of the 47 people referred, 9 people completed the full 12-week pilot programme; others were unable to complete it due to ill health.

The participants' mental wellbeing was scored and recorded before and after attending the Wellbeing Garden using a short version of the validated Warwick-Edinburgh Mental Well-being Scale (SWEMWBS). The scale enables the monitoring of mental wellbeing and uses positively worded statements relating to how often they have been feeling optimism, usefulness, relationships, personal clarity and decision-making. There are five response categories ranging from 'none' to 'all of the time' for each of the statements. The SWEMWBS scores indicated that the participants' wellbeing scores improved, and low wellbeing scores, in particular, improved by 20% (*Figure 2*).

The positive outcomes observed for the participants of the 2019 pilot programme at the Wellbeing Garden indicated that those who joined in the gardening activities had improved mental wellbeing scores, improved confidence and reduced social isolation. In addition, qualitative feedback was collected through focus groups with those who attended

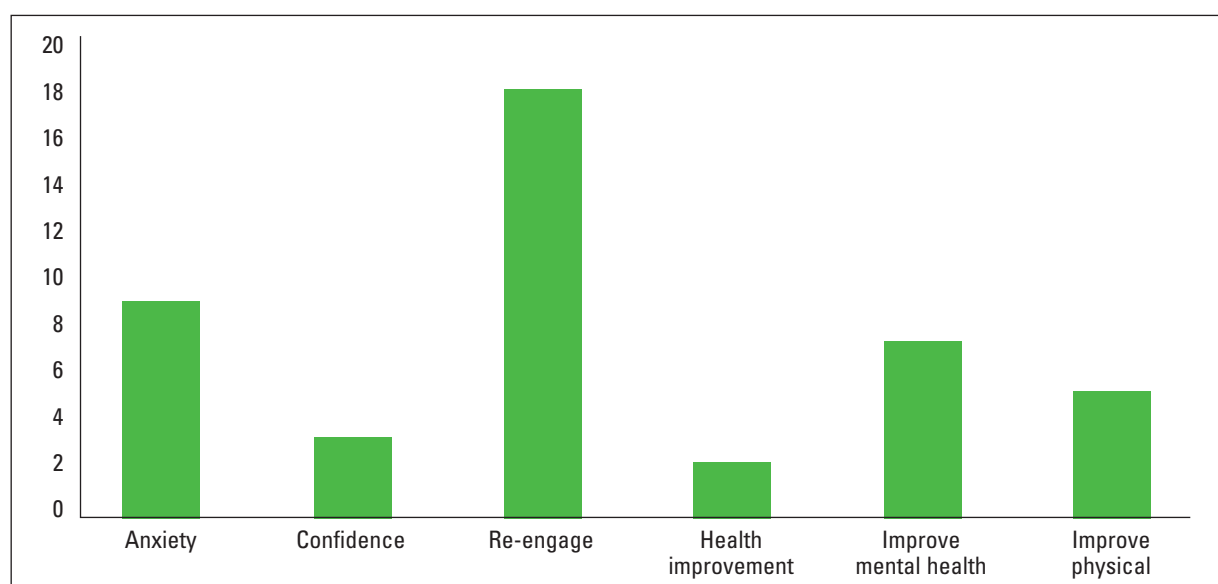


Figure 1. Reasons for referral

the Wellbeing Garden. These were thematically analysed and highlighted the positive impact of the experiment; for example, one participant spoke about the positive impact this experience has had, which has motivated him to improve his mobility through the use of a mobility scooter:

*'... It just takes me out my shell and really made me ... positive; I'm a lot more positive now. As I said—just before I came down here—I'd given up, really. That's why I got the scooter. I thought, now, I'm going to get myself a scooter and I'm going to get myself out. This is just like the icing on the cake.'* (participant 1)

Another participant stated:

*'I can't begin to say. It's done me the world of good. I'd say it's saved me ... I don't know where I'd have gone if there hadn't have been this. I'm so grateful I agreed to the Enhanced Care Team, because I wouldn't have been able to do it otherwise.'* (participant 3)

The SWEMWBS data and qualitative findings made a clear case for gardening as a nature-based social prescription at RHS Bridgewater. Thus, the future programme for the community Wellbeing Garden will incorporate a varied daily programme of user-led activities for participants from a variety of local organisations. In order to provide access to the three levels of nature, this will include therapeutic gardening activities within the community Wellbeing Garden as well as a range of other interventions, such as nature walks and craft-based activities. The Wellbeing Garden represents one example of how nature-based interventions can be used as a social prescription. Community nurses in the locality will be able to refer patients to the link worker and help promote this asset-based, salutogenic approach to wellbeing.

### Implications for community nurses: getting involved

The concept of using non-medical approaches is not new to community nursing; for example, the need to promote a more salutogenic approach was espoused over 14 years ago by Cowley and Billings (1999), who advised that the prevalent illness perspective in the NHS diluted awareness of the socioeconomic influences of wellness. In doing so, there is a risk that the pathogenic model prevails in an era where the divide between health and social inequalities continues to evade public health. Community nurses have significant experience in salutogenic approaches and could provide added value by working with link workers to help communities reconnect, engage and participate through social prescription services to non-medical interventions, such as RHS Bridgewater. This expertise places community nurses in a unique position to support this social movement and promote self-care and autonomy through social prescribing. Simply raising awareness of non-medical interventions, collaborating across the inter-agency

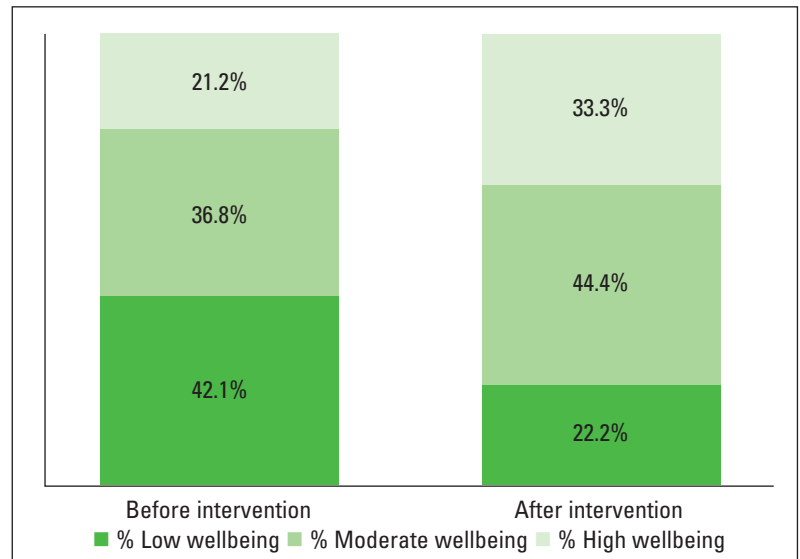


Figure 2. Proportion of clients in each group before and after the intervention

interface and promoting cross-sectional working with the third sector could help support and empower communities and individuals.

However, it has been recently acknowledged that personal autonomy has been impacted by the introduction of COVID-19 restrictions, resulting in mass population social distancing, and presenting significant health and wellbeing challenges. Social prescribing services have responded by repurposing social prescriptions and the link worker roles to facilitate leaflet drops, food bank deliveries, online safeguarding and the development of resilience teams designed to support communities in this time of crisis. Community nurses could use holistic social prescribing to offer a solution, help prevent social isolation caused by distancing and promote community resilience.

Arguably, nature is 'naturally' a great healer, and during crises such as the COVID-19 pandemic, it can offer respite to anyone able to look outside, take their (once a day) walk or, where possible, participate in nature through gardens and gardening. Paradoxically, promoting a nature-based activity could help limit the negative emotional and mental impact of social distancing by supporting ways to engage with nature that enhance mood and reduce anxiety. Litlekare et al (2020) pointed out that exposure to natural environments, especially in times of struggles, can help reduce stress and promote feelings of being away, thus promoting nature as a multisensory intervention that could help alleviate stress and promote a sense of calm and wellbeing (Litlekare et al, 2020). Using nature-based solutions such as gardening as part of a social prescription to combat social distancing could help people who may not typically go outside to exercise, to view or be in nature.

Collaborating with link workers will facilitate involvement with local mutual aid groups that could help support those who are self-isolating through the social prescription offer. Connecting people to the wider community assets, including nature, through gardening can support community cohesion,

## KEY POINTS

- ♦ Social prescribing provides a conduit that enables personalised care for people in living in the community
- ♦ As an asset-based approach, social prescribing uses a salutogenic paradigm to help us understand 'what matters to someone' rather than 'what is the matter with them'
- ♦ Nature-based solutions such as gardening can help improve wellbeing as part of a social prescription
- ♦ Community nurses are ideally placed to work alongside link workers and the voluntary, community and social enterprise sector (VCSE) to facilitate social prescriptions and support community resilience

## CPD REFLECTIVE QUESTIONS

- ♦ Consider the last patient that you cared for who had a long-term condition and reflect on whether your decision-making was personalised
- ♦ Reflect on your daily practice in the community. Explore how you imbedded asset-based community development (ABCD) in your practice and whether this influenced your decision-making
- ♦ Based on the community assets in your geographical area, what nature-based solutions are you aware of?

and forge a stronger connection with the voluntary sector. Community nurses have an opportunity to engage with link workers to reach out through webinars and work together to sustain personalised, salutogenic approaches to health and wellbeing, promote the use of nature and get involved in wider asset-based activities.

## Conclusion

Now is the time for collaboration and support across the statutory and third sectors to use an evidence-based approach that can help some of the most vulnerable members of society, during and after the COVID-19 crisis. Supporting individuals and communities using traditional ABCD approaches can help the community recover from the onslaught of COVID-19 and help reduce patient anxiety. By working alongside link workers, community nurses could help to assess and identify those who may benefit from a salutogenic response. Being aware of the social prescribing network in the locality can promote collaboration and interprofessional care during and after the crisis, equally, supporting individuals to access nature (where possible) through the three levels, and this can have significant benefits, aid community recovery and make a difference to communities. **BJCN**

*Accepted for publication: April 2020*

*Conflicts of interest: none*

- Antonovsky A. Unravelling the mystery of health. How people manage stress and stay well. San Francisco (CA): Jossey-Bass; 1987
- Bakolis I, Hammoud R, Smythe M et al. Urban mind: using smartphone technologies to investigate the impact of nature on mental well-being in real time. *BioScience*. 2018; 68(2):134–145. <https://doi.org/10.1093/biosci/bix149>
- Bhatti M. A taste for gardening: classed and gendered practices. 2010. <https://doi.org/10.1177/0094306109356659>

- Bragg R, Atkins G. A review of nature-based interventions for mental health care. 2016. <https://tinyurl.com/z6fk7mt> (accessed 28 April 2020)
- Christian MS, Evans CEL, Cade JE. Does the Royal Horticultural Society campaign for school gardening increase intake of fruit and vegetables in children? Results from two randomised controlled trials. Southampton (UK): NIHR Journals Library. 2014. <https://doi.org/10.3310/phr02040>
- Cook P, Howarth M, Wheeler P. Biodiversity and health in the face of climate change: implications for public health. In: Marselle MR, Stadler J, Korn H, Irvine KN, Bonn A. Biodiversity and health in the face of climate change: challenges, opportunities and evidence gaps. Cham (Switzerland): Springer; 2019:19
- Cowley S, Billings JR. Resources revisited: salutogenesis from a lay perspective. *J Adv Nurs*. 1999; 29(4):994–1004
- Csikszentmihalyi M. Flow and the foundations of positive psychology: the collected works of Mihaly Csikszentmihalyi. Dordrecht: Springer; 2014
- Dalton AM, Jones AP, Sharp SJ, Cooper AJ, Griffin S, Wareham NJ. Residential neighbourhood greenspace is associated with reduced risk of incident diabetes in older people: a prospective cohort study. *BMC Public Health*. 2016; 16(1):1171. <https://doi.org/10.1186/s12889-016-3833-z>
- Gonzalez MT, Hartig T, Patil GG, Martinsen EW, Kirkevold M. Therapeutic horticulture in clinical depression: a prospective study of active components. *J Adv Nurs*. 2010; 66(9):2002–2013. <https://doi.org/10.1111/j.1365-2648.2010.05383.x>
- Henry H, Howarth M. An overview of using an asset-based approach to nursing. *Gen Pract Nurs*. 2018; 4(4):53–59
- Howarth M, Lister C. Social prescribing in cardiology: rediscovering the nature within us. *Br J Cardiac Nurs*. 2019; 14(8):1–9
- Kimberlee R. What is social prescribing? *Adv Soc Sci Res J*. 2015; 2(1):102–110. <https://doi.org/10.14738/assrj.21.808>
- Kurt S, Osuke KK. The effects of colour on the moods of college students. *SAGE Open*. 2014. <https://doi.org/10.1177/2158244014525423>
- Li Q. Effect of phytoncide from trees on human natural killer cell function. *Int J Immunopathol Pharmacol*. 2009; 22(4):951–959. <https://doi.org/10.1177/039463200902200410>
- Lindström B, Eriksson M. Salutogenesis. *J Epidemiol Community Health*. 2005; 59:440–442
- Litlaskare S, MacIntyre TE, Calogiuri G. Enable, reconnect and augment: a new era of virtual nature research and application. *Int J Environ Res Public Health*. 2020; 17(5):1738. <https://doi.org/10.3390/ijerph17051738>
- Lopez V, Nielsen B, Solas M, Ramirez MJ, Jäger AK. Exploring pharmacological mechanisms of lavender (*Lavandula angustifolia*) essential oil on central nervous system targets. *Front Pharmacol*. 2017; 8:280. <https://doi.org/10.3389/fphar.2017.00280>
- Louv R. Last child in the woods: saving our children from nature-deficit disorder. Chapel Hill (NC): Algonquin Books of Chapel Hill; 2005
- Luker KA, McHugh GA. Nurse prescribing from the community nurse perspective. *Int J Pharm Pract*. 2002; 10(4):273–280
- McDonald L. Florence Nightingale: the Nightingale school. Collected works of Florence Nightingale. Vol. 12. Waterloo (Canada): Wilfrid Laurier Press; 2009:625
- National Academy for Social Prescribing. A social revolution in wellbeing. 2020. <https://tinyurl.com/y7b8mav4> (accessed 29 April 2020)
- NHS England. The long term plan. 2019. <https://www.longtermplan.nhs.uk/> (accessed 28 April 2020)
- Pretty J, Peacock J, Sellens M, Griffin M. The mental and physical outcomes of green exercise. *Int J Environ Health Res*. 2005; 15:319–337. <https://doi.org/10.1080/09603120500155963>
- Royal Pharmaceutical Society. A competency framework for all prescribers. 2016. <https://tinyurl.com/ycaa93el> (accessed 29 April 2020)
- Soga M, Gaston KJ, Yamaura Y. Gardening is beneficial for health: a meta-analysis. *Prev Med Rep*. 2016; 5:92–99. <https://doi.org/10.1016/j.pmedr.2016.11.007>
- Takano T, Nakamura K, Watanabe M. Urban residential environments and senior citizens' longevity in megacity areas: the importance of walkable green spaces. *J Epidemiol Community Health*. 2002; 56(12):913–918
- Ulrich RS. View through a window may influence recovery from surgery. *Science*. 1984; 224(4647):420–421. <https://doi.org/10.1126/science.6143402>
- Van den Berg AE, van den Berg CG. A comparison of children with ADHD in a natural and built setting. *Child Care Health Dev*. 2011; 37(3):430–439. <https://doi.org/10.1111/j.1365-2214.2010.01172.x>
- Van den Bosch M, Bird W. Oxford textbook of nature and public health: the role of nature in improving the health of a population. Oxford: Oxford Textbooks; 2019
- Wilms L, Oberfeld D. Color and emotion: effects of hue, saturation, and brightness. *Psychol Res*. 2018; 82(5):896–914. <https://doi.org/10.1007/s00426-017-0880-8>
- World Health Organization. Global recommendations on physical activity for health. 2010. <https://tinyurl.com/yd4ugz84> (accessed 28 April 2020)
- Yang YC, McClintock MK, Kozloski M, Li T. Social isolation and adult mortality: the role of chronic inflammation and sex differences. *J Health Soc Behav*. 2013; 54(2):183–203. <https://doi.org/10.1177/0022146513485244>