

“You have to experience the positive effects of nature for yourself to be convinced”

Interview with Claudel Pétrin-Desrosier,

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KEY POINTS

▶ In Quebec, the Prescri-Nature programme promotes spending time immersed in a natural environment. Free entry to major Canadian parks can be offered by participating health and social care professionals but a walk in the wilderness isn't the only way to improve well-being. Looking at plant life while sitting on a park bench or digging soil in a community garden also does the trick.

La Santé en action: How did Prescri-Nature come into being in Quebec?

Claudé Pétrin-Desrosier: We started to become aware of the issue in 2020, during the COVID-19 pandemic and lockdowns, when people were forced to stay at home. Health professionals, including several members of the Quebec Association of Physicians for the Environment, started encouraging their patients to get out and about in nature to preserve their mental health. Then, in November 2020, the British Columbia Parks Foundation launched Canada's first nature prescription programme, called PaRx, which allows doctors, nurses and other health specialists to prescribe free admission to the province's parks. The programme then expanded in other parts of the country,

such as Manitoba and Saskatchewan. Prescri-Nature is the French language version, adapted for the people of Quebec.

S.A.: What does it actually involve?

C.P.-D.: In Quebec, we champion a programme promoting the health benefits of exposure to nature. We have chosen not to highlight free admission to the parks, although professionals who register on the Prescri-Nature website can prescribe this for their patients. We want to make the programme universally accessible and avoid sending the message that you have to see a doctor to get access to a nature prescription. The aim is to raise awareness among the general public and the health community about the benefits of nature for physical and mental health, as supported by the scientific literature. This information needs to be spread widely in mass media for the general public. Professionals need training to take on board this knowledge and incorporate it into their day-to-day practice. This is all the more important as the subject is not covered in the medical school curriculum. From the very start, it was essential for us to look for partners and now the programme is recognised and supported by a number of professional bodies, including the Quebec College of Physicians, the Quebec Order of Nurses, the Order of Midwives, the Order of Social Workers, the Psychiatric Association, the Association of Preventive Medicine Specialists, and the faculties of medicine at Laval, Sherbrooke and Montreal universities. We use the word “prescription” in a very broad sense, because some of these

professions cannot legally prescribe: they are more like recommendations. However, talking about nature as a prescription is easier for everyone to understand. The idea is to incorporate it into an arsenal of advice that different professionals can offer in line with their practice, from psychologists to social workers.

S.A.: What might these nature recommendations be?

C.P.-D.: It might be sitting on a park bench and contemplating, walking by the water, putting a bird feeder by your window, having a picnic in the countryside or gardening. The idea often comes as a surprise, because people aren't used to it. However, when this suggestion is accompanied by a documented presentation, curiosity takes over. People instinctively feel that nature is good for them. When you ask someone to close their eyes and imagine themselves in a soothing place, they often picture themselves in nature and rarely in a dense, noisy urban environment! Natural prescribing is not treatment, even though it may form part of a care strategy. The data shows that exposure to a natural environment can be beneficial in the management of chronic pain, depression or anxiety disorders. It can be used in addition to medication, psychological treatment, mindfulness meditation, etc. We need to adapt to patients, to their needs, but also to their values.

S.A.: Is the Prescri-Nature programme based on firm evidence?

C.P.-D.: There have been two major studies whose results we can cite. The first study [1], which looks at the physiological effects of natural

therapies, was carried out in Japan on a sample of 280 participants with an average age of 21 and no health problems. Half the group spent the first day in the forest, walking or contemplating; the other half did the same thing for the same length of time in an urban area. Then, on the second day, the groups were reversed as a control. The results showed that forest “bathing” reduced levels of cortisol (often called a stress hormone) in the saliva, both systolic and diastolic blood pressure and heart rate. The second study [2], conducted in the UK among 20,000 individuals, concluded that people who had at least 120 minutes of “recreational contact with nature” over the previous seven days reported better perceived health or a higher index of well-being than those who had not had any connection with a natural environment. Positive effects are seen even in the 0 to 60 minutes bracket, reaching their highest score in the 120 to 180 minutes bracket. That’s why we recommend a universal prescription of 15 to 20 minutes per session for a total of two to three hours a week. Of course, it’s not realistic for everyone; for some people – those who don’t leave their homes, or those who have mobility problems – it’s too big a step to take. We need to take things slowly. However, you don’t have to be physically active to enjoy the benefits of nature, although it is a plus. If the idea of physical activity is seen as a barrier, a more sedentary form of immersion in nature, geared towards observing plants and wildlife, can be an alternative.

S.A.: What obstacles do you see people facing?

C.P.-D.: The first is undoubtedly accessibility, in particular the obstacle of geography. However, it is possible to work on the perception of what a natural area is. We need to make people understand that they can enjoy the benefits of nature without necessarily going to a remote wilderness but also by going to an urban park, a community garden or a courtyard planted with trees and flowers. The literature shows us that “the impression of being in nature” is an important factor. Obviously,

if a neighbourhood’s infrastructure doesn’t measure up, that will be an obstacle: residents don’t want to go to an urban park that isn’t safe, where the benches are broken, and so on. Lack of time can seem like a problem, as does changing a lifestyle habit. The same dynamics are at work as for stopping smoking or starting exercising: you have to enjoy yourself and experience the positive effects of nature for yourself to be convinced. Guidance and support from professionals, having a social network to rely on or the support of a community group, are all facilitating factors.

S.A.: What are the findings of the literature review you carried out for your dissertation on the effectiveness of nature prescribing programmes?

C.P.-D.: Firstly, structured programmes such as PaRx or Prescri-Nature are still rare and have only come about recently internationally. This means that there has been no scientific assessment of their direct beneficial effects. While data exists on the link between immersion in nature and improved physical and mental health, there are still areas we don’t understand. For example, if forest “bathing” leads to a drop in blood pressure, does this drop last? And if so, for how long? Nevertheless, the body of knowledge is sufficiently convincing for us to include exposure to nature in our recommendations. In addition, no harmful effects have been documented. The only possible contraindications are for people suffering from seasonal allergies, but we can point them in the direction of natural environments where they will be less exposed. People are also worried about Lyme disease, which is on the rise in Quebec as a result of global warming. However, it is entirely possible to protect yourself by wearing long sleeves and trousers to avoid picking up ticks and/or inspecting your body when you return from a walk. It just means adopting a set of good practices to make sure that you only benefit from being immersed in nature. That’s why it’s a good idea for professionals to support this approach by issuing a “prescription”. Along these lines, a structured

programme promoting exposure to nature, deployed on a large scale and taking into account social inequalities in health, could prove to be an innovative measure in primary and secondary prevention. This has even more potential if it is accompanied by intensive greening measures in the most depleted urban areas. ■

Interview by Nathalie Quéruel,
Editor-in-Chief.

For more information

- Prescri-Nature programme.
Online: <https://www.prescri-nature.ca>
- Introductory training in Prescri-Nature for healthcare professionals.
Online: https://www.youtube.com/watch?v=BFBn1slirVQ&t=2s&ab_channel=BCParksFoundation

REFERENCES

- [1] B.J. Park, Y. Tsunetsugu, T. Kasetani, T. Kagawa, Y. Miyazaki. The physiological effects of Shinrin-yoku (taking in the forest atmosphere or forest bathing): evidence from field experiments in 24 forests across Japan. *Environmental Health and Preventing Medicine*, 2010, vol. 15, no. 1: p. 18-26. Online: https://www.researchgate.net/publication/26332676_The_physiological_effects_of_Shinrin-Yoku_taking_in_the_forest_atmosphere_or_forest_bathing_Evidence_from_field_experiments_in_24_forests_across_Japan
- [2] M.P. White, I. Alcock, J. Grellier, B.W. Wheeler, T. Hartig, S.L. Warber *et al.* Spending at least 120 minutes a week in nature is associated with good health and wellbeing. *Scientific Reports*, 2019, vol. 9, no. 1: 7730. Online: <https://doi.org/10.1038/s41598-019-44097-3>