

Physicians: Pedaling a cleaner path to health

Physicians can promote both patient health and planetary health with one brief intervention: suggest patients cycle.

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ABSTRACT: Environmental degradation and climate change are the defining crises of our time and are of great concern to most Canadians. Physicians are leaders and spokespersons in every community; as such, it is critical that as medical students and physicians we recognize our responsibility to be informed and vocally engaged in environmental issues. But how is having an environmental conscience relevant to a 10-minute patient interview? Promoting cycling and discouraging driving is often a good place to start.

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Environmental degradation and climate change are the defining crises of our time and are of great concern to most Canadians.¹ In 2007 the General Council of the Canadian Medical Association overwhelmingly elected to “discuss environmental issues with patients, to work with health care facilities to reduce or recycle waste, to make their own work and home environments environmentally friendly, and to work to include environmental programs in medical education.”² This was a remarkable event in that it acknowledged that the responsible physician is not only alert to direct environmental and occupational threats to patient health, but is an active agent of change striving to reduce the carbon footprint of his or her community. It is easy to dismiss this call as yet another untenable demand for the (already inadequate) time of the busy physician; nonetheless, the role of environmental advocate is intimately coupled to

nearly all of the CanMEDS essential competencies, most notably to that of health advocate.

Physicians are leaders and spokespersons in every community; as such, it is critical that as medical students and physicians we recognize our responsibility to be informed and vocally engaged in issues as widespread as the use of cosmetic pesticides, air and water quality, sewage treatment systems, the effect of salmon farms on local ecosystems, and how a changing Canadian climate (particularly in the North³) can be expected to change local patterns of health and disease.⁴

But how is having an environmental conscience relevant to a 10-minute patient interview? This is left, like so many things, to the physician's best judgment; but perhaps there is some low-hanging fruit: promoting cycling, discouraging driving, and taking note of how energy and waste are managed in your workplace.

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The benefits of cycling need little elucidation: cardiovascular exercise, decreased capital investment, negligible carbon output, zero impact on local air quality, and an increased sense of community.⁵

Even if patients (and doctors) are unable or unwilling to jump on a bike, they can acknowledge that driving is fast being recognized as the tobacco of the 21st century, a nasty habit that may increase the risk of stress-related health problems,⁶ and which generates noxious air pollution to the detriment of everyone. The air pollution produced by motor vehicles has become so much a part of our society that we often forget how significantly it impacts our health. Long-term exposure to fine particulate pollution has been observed to increase one's risk of lung cancer and cardiopulmonary mortality,⁷ and mortality from cardiopulmonary illness has been observed to be higher in those living within 50 metres of a major road.⁸ One cannot overlook the tremendous injury burden due to motor vehicle accidents. Over 200 000 Canadians are injured in vehicle accidents each year,⁹ which means that driving is likely one of the riskier behaviors of many of your patients. In comparison, public transit is roughly 10 times safer than car transport on a per kilometre basis¹⁰ (EU data). Cycling and walking are, unfortunately, more dangerous than car transport on a per kilometre basis,¹⁰ but clearly the risk associated with these activities is offset considerably by their ability to oppose the sedentary mortalities such as metabolic syndrome.¹¹

Finally, taking note of how your work space manages energy and waste can be both humbling and empowering. Medicine is a dirty business, environmentally speaking. Hospitals and large care centres are much like industrial factories, with sterilizers, boilers, incinerators, lighting systems, compressed gases, and various other mech-

anical systems. Collectively, Canadian hospitals consume 64 million GJ, equivalent to the annual energy consumption of more than half a million Canadian households.¹² While some of these emissions may currently be a necessary evil of modern medical care, there is little doubt that physicians, design professionals, and building managers can work together to dramatically reduce the carbon footprint of Canada's health care institutions.

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The CMA, CanMEDS, and Canadians are appealing to Canadian physicians to become active members of the environmental community. So next time you come across one of the 48% of Canadians¹³ (or 45% of physicians¹⁴) who are overweight or obese, consider recommending a bicycle, and feel free to tell him or her it is for the environment.

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