Climate change is a health issue



Sarah Fraser MSc MD CCFP, EDITORIAL FELLOW

There is something infinitely healing in the repeated refrains of nature—the assurance that dawn comes after night, and spring after winter.

Rachel Carson, The Sense of Wonder¹

s awareness of the climate crisis escalates, our role in primary care is being reframed with urgency. Climate change is a fundamental determinant of health. As public health advocates, family physicians have a responsibility to engage seriously in environmental activism.

Climate change and health are linked in innumerable ways, as discussed by Xie et al in this issue (page 725).² For example, the distribution of deer ticks in Canada is expanding as warming temperatures broaden their habitat. Rates of Lyme disease are increasing correspondingly.3 Heat waves are increasingly deadly—in British Columbia, 569 sudden deaths during 1 month this summer were heat related.4 Recent wildfires in Canada are more intense and more frequent than in previous years, resulting in droughts and displacement.5 In medicine, we are already seeing the consequences of climate change in our offices, emergency departments, and hospital wards.

The impact of climate change goes beyond physical health, with serious implications for mental health. The literature describes ecological grief as grief secondary to experienced or anticipated ecological losses.⁶ Stress and mood disorders are predictable reactions to floods, droughts, and fires. Physicians in rural and remote communities are witnessing the health consequences of these tragedies in real time. In Canada's north, permafrost degradation and the loss of sea ice is affecting the stability and health of arctic communities, whose residents are now at risk of losing their homes, culture, and traditional way of life. 7,8 As climate change continues, the clinical consequences will only worsen.

In August, the Intergovernmental Panel on Climate Change published the first of 3 planned reports. The panel's summary outlines the problem with clarity: "It is unequivocal that human influence has warmed the atmosphere, ocean and land."9 The summary was equally clear on the impact that climate change is already having:

Human-induced climate change is already affecting many weather and climate extremes in every region across the globe. Evidence of observed changes in

Cet article se trouve aussi en français à la page 720.

extremes such as heatwaves, heavy precipitation, droughts, and tropical cyclones, and, in particular, their attribution to human influence, has strengthened.9

The report identifies that the largest contributor is greenhouse gas emissions from fossil fuels. To slow climate change, these emissions would need to halt immediately.

What role can physicians play? A core competency of CanMEDS-Family Medicine is health advocacy¹⁰; environmental advocacy is a form of health advocacy. On a macro level, we can be allies with Indigenous peoples and their land, stand against large-scale polluters, or help change consumption as a society. Micro-level advocacy can happen in the clinic, as described by Green et al (page 739).11

With the fourth wave of the pandemic upon us, many are feeling burned out, with our energy for advocacy waning. Tackling climate change might seem daunting or even impossible. But instead of viewing it as yet another crisis in addition to coronavirus disease 2019, we can think of our pandemic experience as a powerhouse of change making. We learned what can happen when massive action is taken on a global scale. A new vaccine was created in record time. Workplaces and conferences shifted online. Communities worked together for a common cause. Change can happen, if political and public support exists.

If we hope to keep our patients and the public safe and healthy into the next decades, we need to reframe environmental advocacy as a central responsibility in primary care. Whether we undertake advocacy on a large scale or through small interventions in our day-to-day work, these actions will make an impact if we do them collectively. Environmental activism in medicine can no longer be a fringe activity. We simply do not have the time.

- Carson R, Pratt C. The sense of wonder. New York, NY: Harper & Row; 1965.
- Xie E, Howard C, Buchman S, Miller FA. Acting on climate change for a healthier future. Critical role for primary care in Canada. Can Fam Physician 2021;67:725-30 (Eng), e269-74 (Fr).
- McPherson M, García-García A, Cuesta-Valero FJ, Beltrami H, Hansen-Ketchum P, MacDougall D, et al. Expansion of the Lyme disease vector Ixodes scapularis in Canada inferred from CMIP5 climate projections. Environ Health Perspect 2017;125(5):057008.
- Government of British Columbia. Heat-related deaths in B.C. Victoria, BC: BC Coroners Service: 2021.
- Isai V. Canadian wildfires could intensify from a looming heat wave. The New York Times 2021 Aug 9. Cunsolo A, Ellis NR. Ecological grief as a mental health response to climate change-related loss. Nat Clim Chana 2018:8:275-81.
- Hjort J, Karjalainen O, Aalto J, Westermann S, Romanovsky VE, Nelson FE, et al. Degrading permafrost puts Arctic infrastructure at risk by mid-century. Nat Commun 2018;9(1):5147.
- Greenwood M, Lindsay NM. A commentary on land, health, and Indigenous knowledge(s). Glob Health Promot 2019;26(3 Suppl):82-6.
- IPCC, Summary for policymakers, In: Masson-Delmotte V, Zhai P, Pirani A, Connors SL, Péan C, Berger S, et al, editors. Climate change 2021: the physical science basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, UK: Cambridge University Press, In press,
- 10. Ince-Cushman D. Health advocate. In: Shaw E, Oandasan I, Fowler N, editors. CanMEDS-FM 2017: a competency framework for family physicians across the continuum. Mississauga, ON: CFPC; 2017.
- 11. Green S, Sakuls P, Levitt S. Cycling for transportation. Can Fam Physician 2021;67:739-42 (Eng.), e280-4 (Fr).

Can Fam Physician 2021;67:719 (Eng), 720 (Fr). DOI: 10.46747/cfp.6710719