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Letters to the editor

We welcome original letters of less than 500 words; we may edit them for clarity and length. Letters may be emailed to journal@doctorsofbc.ca or submitted online at bcmj.org/submit-letter and must include your city or town of residence, telephone number, and email address. Please disclose any competing interests.

The inequities of climate change—Intersections between environmental health and health disparities

Climate change has been a global crisis of interest for decades; however, the physical and psychological impacts of climate change, particularly on Canada's underserved populations, are underexplored. The impacts of climate change are readily visible in the country, with Canada's average temperatures warming at twice the mean global rate.[1] However, recent extreme weather events, including wildfires raging through Western Canada and heat-induced storms in Ontario and Quebec, have brought the devastating health consequences of climate change to light. Canada has experienced unprecedented impacts from this wildfire season, with more than 5800 reported fires and over 15 million hectares burned to date.[2] Over 29 000 Albertans were left displaced by wildfires in the period of a few months, and thousands in British Columbia and the Northwest Territories were required to evacuate their communities as flames strained emergency services.[3] However, as we saw these events unfold, it became increasingly clear that the health hazards related to these environmental changes are not experienced uniformly across all populations in Canada,[4] and the differential impacts on physical and mental health outcomes have the potential to exacerbate existing health inequities for oppressed and underserved populations.

Differences in regional distribution and adaptive capacities are key factors contributing to potentially disproportionate exposure to climate-related events and resulting harms. For instance, lower socioeconomic regions, as well as northern and remote communities, face challenges in responding to and recovering from environmental hazards and disasters secondary to various factors, including lack of critical infrastructure and decreased capacity for emergency planning and response.[4] In particular, Indigenous communities have been overrepresented in wildfire evacuations, experiencing 42% of evacuation events, despite representing only 5% of the country's population.[1,5] Limited resources, resulting from chronic underfunding and remote locations, make it all the more challenging to access emergency resources and support in times of crisis, thus prolonging and intensifying the detrimental impacts of climate events.[1]

Physical impacts of climate change and environmental disasters are exacerbated by underlying health determinants such as poor housing, overcrowding, and geographic proximity to areas more prone to wildfires. A Health Canada report estimated that, annually, 54 to 240 premature deaths in Canada can be attributed to short-term exposure to wildfire, and 570 to 2500 premature deaths to long-term exposure.[4] Furthermore, access to and availability of basic amenities such as clean water are already strained in Indigenous and northern communities, with disproportionately higher frequency and duration of boiled-water advisories.[4] Extreme weather events can easily overwhelm fragile water treatment systems and exacerbate issues related to water sanitation and exposure to environmental contaminants.[4]

Beyond the physical health impacts, there are significant cultural and mental health implications in the context of place attachment and psychosocial impacts of migration. Evacuees are at risk for post-traumatic stress disorder and anxiety as a result of needing to adapt to new and often less-desirable conditions and loss of social structures and cultural practices tied to the land.[6,7] These impacts extend beyond acute natural disasters; climate change also results in permanent modifications of local landscapes, with detrimental impacts on foraging, trapping, and other culturally significant practices that may affect the mental and emotional health of Indigenous people. For instance, one study identified that environmental changes are closely intertwined with mental health impacts on Indigenous populations in Atlantic Canada, resulting from intangible losses that disrupt core drivers of psychological wellness and health in Indigenous communities.[8]

The record heat and wildfires seen earlier this year are only pieces of an alarming trend of the devastating effects of climate change, and it is expected that these changes will become more catastrophic and more frequent in coming years. It is imperative that the disproportionate impacts these changes have on Canada's Indigenous, northern, and remote populations are addressed through the development of legislation and federal programs to support building protective infrastructure, with the involvement of Indigenous leadership and partnerships in research efforts to identify needs. It is our responsibility to explore and understand the disproportionate impacts on Canada's oppressed and underserved populations to ensure an inclusive and sustainable direction to our collective climate solution.

—Min Jung Kim, BHSc, UBC Faculty of Medicine, class of 2024
Vancouver

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Re: Justice, rights, and unnecessary suffering

Livestock are subject to crowding and sensory deprivation and must be killed to provide meat. Dr Hajek proposed that we extend promotion of human rights to animals, because cattle and pigs have complex cognitive and emotional lives.[1] I agree.[2]

There are also environmental and health reasons to eat mostly plant-derived food. It takes 4 kg of grain to produce 1 kg of pork,[3] and 7 kg of grain to produce 1 kg of beef.[4] Carbon dioxide is produced by burning oil or gas to produce fertilizer, to pump water for irrigation, and to power farm machinery. The cattle industry is a major source of methane, a potent greenhouse gas.[5] Human-caused climate change is contributing to the drought affecting western North America.[6] Eating less animal-derived food decreases our environmental footprint.

Human disease can be caused by manure-contaminated runoff getting into water sources, as happened in Walkerton, Ontario.[7] Antibiotics are used in raising livestock. This practice accelerates the development of antibiotic-resistant bacteria and can transfer antibiotic-resistant bacteria to humans.[8] Animal-derived foods are calorie-dense, expensive, easily digested, and a major source of cholesterol. The current Canadian lipid guidelines recommend the Mediterranean diet, which contains little meat, to help lower cholesterol.[9]

—Robert Shepherd, MD
Victoria

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Re: How can we improve competence in conducting pelvic exams?

Drs Steidle and Lostchuck are correct in surmising that there is a reluctance on the part of doctors to perform pelvic examinations [*BCMJ* 2023;65:329-330]. My experience suggests it is nothing new.

While practising family medicine in the North of BC in the late 1960s and early 1970s, I was asked to explain why my practice profile registered three standard deviations above "normal" for pelvic exam billings. Investigating the matter, it was found that our nurse instituted a call-in system for Pap smears at the recommended interval for the time. The conclusion to be drawn is that "normal" meant that the need for Pap smears (and thus pelvic exams) was being neglected, perhaps reflecting such reluctance.

The authors also noted a reluctance of supervisors during their medical students' training to permit them to perform pelvic exams. My medical school gynecological training featured an introduction to the pelvic exam. Four volunteers, suitably screened, permitted us trainees to perform pelvic examinations on them to become familiar with pelvic anatomy. It seems this helpful practice has been discontinued.

I suspect the reluctance toward pelvic exams extends to rectal exams. My student training included a pathology department presentation of the medical case of an obscure anemia, the patient having succumbed to this disease. The morgue pathologist was able to demonstrate that a large rectal carcinoma was the cause of the anemia. None of the many examining physicians had performed a rectal exam.

—Anthony Walter, MD
Vancouver

Re: Does working part-time mean I've failed as a feminist?

I'm certain Dr Caitlin Dunne's editorial in the October 2023 issue of the *BCMJ* [2023;65:277] resonates with many. I'd like to point out that this is not only the experience of women in the MD profession, but also of some men.

My life partner and I married in 1969, the year I entered medical school. In her subsequent application to the same program the following year, she encountered significant sexism from the (all-male) application review board during her interview: "Are you planning on a family?" "How does this square with a demanding profession as medicine?" Etc. Bottom line, she shifted career plans and became a sought-after consultant as a speech-language pathologist in school programs, focusing on children with learning difficulties. It also gave her better flexibility over time commitments. That, however, is only half the story.

Twenty years and three children ages 10 and under into our marriage, we had serious discussions about what needed to change if we weren't going to divorce. I was (as was typical) overly committed to my practice, and she had the family burden, to the detriment of her professional development and satisfaction. I consequently agreed that we would equally share the family-raising burden, which entailed me giving up my family practice and working part-time for the next 10 years. This also meant a financial hit in pooled income.

The benefit, however, was such that I couldn't agree more with Dr Dunne's statement that "[t]ime is a nonrenewable resource and . . . 90% of the time you have with your kids is before they turn 18." I found myself volunteering in kindergarten, preparing suppers different from my wife's, and generally engaging in more significant ways in our children's formative years during their learning and sports events.

Looking back, it benefited me in many ways beyond parenthood. My identity was not as glued to the public aura of a medical doctor. I volunteered for nonmedical organizations. As a former engineer, I published a number of review articles on a topic interfacing with physiology. I formed a company focused on interactive multimedia in exercise and ran a pilot study in cardiac rehab using this technology. I worked in various aspects of medicine—hospital ambulatory care and extended care for neuromuscular and traumatic spinal cord injuries, which included ventilators, I was a hospitalist for a time, and in the remaining 5 years of a 42-year career, I focused solely on rural and remote medicine. Looking back, working part-time for a significant time when it counted for my family was the best move I ever made. It saved my marriage, and we remain close as a family—to which I say, hooray for assertive feminism.

—Rainer Borkenhagen, MD (retired)
Vancouver

Correction: Navigating the nonarthritic hip: Labral tears and femoroacetabular impingement

Dr Taylor Crown's article in the December issue (*BCMJ* 2023;65:376-381) has been revised online. The authors requested the highlighted change postpublication: "A head–neck offset value of ~~more~~ less than 8 mm is abnormal and suggestive of a cam deformity."

Supplementary material added: Third-degree heart block secondary to Lyme carditis

In response to a reader's question, Dr Jordanna Roesler has provided two supplementary ECGs, demonstrating third-degree heart block, for her December-issue article (*BCMJ* 2023;65:382-384). The supplementary ECGs are available online for additional information. No changes were made to the article text.