

Lyme law uses “junk science” says expert

A rare private member’s bill on a single health problem — Lyme disease — will be considered by a Senate committee before the end of this year and is poised to become federal law in Canada. But an expert physician has told senators and the health minister the bill is based on “junk science.”

Bill C-442 requires the federal health minister to convene a conference of provincial and territorial health ministers, stakeholders and patient groups within a year to hammer out a framework that includes a medical surveillance program, Canadian guidelines and standardized educational materials.

The sponsor of the bill, Green Party Leader Elizabeth May (Saanich–Gulf Islands, BC), says she’s received letters of support for the bill from the Canadian Medical Association and the College of Family Physicians of Canada. The bill was passed unanimously by the House of Commons.

What could be amiss with promoting action on an emerging disease? At issue are duelling guidelines, explains Dr. David Patrick, director of the School of Population and Public Health at the University of British Columbia. The Lyme disease guidelines most commonly followed by physicians are those of the Infectious Diseases Society

of America (IDSA). Patrick takes issue with the Canadian bill’s preamble, which criticizes the IDSA guidelines as being “so restrictive as to severely limit the diagnosis of acute Lyme disease and deny the existence of continuing infection, thus abandoning sick people with a treatable illness.”

Patrick says he’s concerned this implies support for another set of guidelines issued by the International Lyme and Associated Diseases Society, which advocate long-term courses of various antibiotics. In 2010, an independent review of these guidelines by the Health Protection Agency in the United Kingdom called them “not evidence based and poorly constructed.” The guidelines’ “poorly defined case definitions” would result in high rates of misdiagnosis, and its “vague treatment recommendations” could cause harm, the review concluded.

“Legislation in the Parliament of Canada should not be based on this,” says Patrick, calling it “pseudoscience.”

Timothy Caulfield, director of the Health Law Institute at the University of Alberta in Edmonton, agrees. “This is different from a government adopting an evidence-based public health policy like seat belts and vaccination. The science in this area is extremely contested,” he says, citing articles in *The Lancet Infectious Diseases* (2011;11:713-9) and *New*

England Journal of Medicine (2007;357:1422-30) about advocacy of chronic Lyme treatment as part of an antiscience movement.

May says she took medical concerns into account. She spoke with physicians and worked with House of Commons legislative drafting experts while crafting the bill — one of the few to include references to medical journals. “The operative sections of the bill do not offend Dr. Patrick’s concerns at all. Once passed, this law should meet Dr. Patrick’s concerns,” she says.

Patrick has asked senators to reword three paragraphs in the bill’s preamble and add that Canadian guidelines must be evidence-based.

However, May says any wording changes to the bill at this point would mean it would have to go back to the House of Commons and would not receive royal assent before the next election, essentially killing the bill.

Patrick says he is concerned that politicized Lyme disease advocacy in the United States has led to incorrect diagnoses. “The problem is not an intellectual joust. We’re seeing the fallout of false-positive diagnoses.”

May says she’s aware of the concern about incorrect Lyme diagnoses in the US. “The much more common complaint north of the border is that people have Lyme disease and it is not diagnosed and treated on time,” which can lead to post-Lyme disease syndrome.

May says she introduced the bill because of her constituents’ concerns and because the spread of Lyme disease is linked to climate change.

In a federal system where health is both a provincial and federal responsibility, she says framework legislation does not intrude on provincial jurisdiction. “This may be a model that works well for coordination in the future.”

But Caulfield questions legislation concerning a specific disease. “In general, I think it is more appropriate to allow the scientific method and the processes surrounding biomedical inquiry to drive research priorities.” — Carolyn Brown, Ottawa, Ont.



AlexRaths/iStock/Thinkstock

A leader in public health says a proposed federal bill on tick-borne Lyme disease is not based on good evidence.

CMAJ 2014. DOI:10.1503/cmaj.109-4936